Table 41

NORTHERN IRELAND WATER LIMITED - ANNUAL INFORMATION RETURN 2010

ANNUAL INFORMATION RETURN- TABLE 41 KEY OUTPUTS
HEALTH & SAFETY INFORMATION (NIW only)

	DESCRIPTION	UNITS	DP	1 BASE YEAR SBP 2006-07	CG	2 REPORTING YEAR 2007-08	CG	3 REPORTING YEAR 2008-09	CG	4 REPORTING YEAR 2009-10	CG
A	**LOST TIME DUE TO SICKNESS AND ACCIDENTS AND INCIDENCE OF OCCUPATIONAL ILL HEALTH**										
1	Employee total	nr	0	1709	A2	1677	A2	1579	A2	1388	A2
2	Total days lost due to sickness, accident and occupational ill health	nr	0	21871	A2	18882	A2	17170	A2	10873	A2
3	Total days lost - rate per 1000 employees	nr	2	12815.00	A2	11259.39	A2	10873.97	A2	7833.57	A2
4	Number of incidents of occupational ill health	nr	0	152	A2	172	A2	250	A2	147	A2
5	Incidents of occupational ill health - rate per 1000 employees	nr	2	88.96	A2	102.56	A2	158.00	A2	105.91	A2
B	**RIDDOR REPORTS**										
6	Total RIDDOR incidents	nr	0	17	A1	16	A1	11	A1	11	A1
7	RIDDOR - rate per 1000 employees	nr	2	9.95	A1	9.54	A1	6.97	A1	7.93	A1
8	3-day accident rate per 1000 employees	nr	2	9.95	A1	9.54	A1	11.00	A1	7.93	A1
9	Major/fatal accident rate per 1000 employees	nr	2	0.00	A1	0.00	A1	6.97	A1	0.00	A1
C	**CONTRACTORS' LOST TIME DUE TO SICKNESS AND ACCIDENTS, AND INCIDENCE OF OCCUPATIONAL ILL HEALTH**										
10	Contractors' employees total	nr	0			N/C		N/C		N/C	
11	Total days lost due to sickness, accident and occupational ill health	nr	0			N/C		N/C		N/C	
12	Total days lost - rate per 1000 employees	nr	2			N/C		N/C		N/C	
13	Number of incidents of occupational ill health	nr	0			N/C		N/C		N/C	
14	Incidents of occupational ill health - rate per 1000 employees	nr	2			N/C		N/C		N/C	
D	**CONTRACTORS' RIDDOR REPORTS**										
15	Total RIDDOR incidents	nr	0			N/C		N/C		7 + 1 (DO)	B2
16	RIDDOR - rate per 1000 contractors' employees	nr	2			N/C		N/C		N/C	
17	3-day accident rate per 1000 contractors' employees	nr	0			N/C		N/C		N/C	
18	Major/fatal accident rate per 1000 contractors' employees	nr	2			N/C		N/C		0.00	A2

Table 41 – Health and Safety Information (NIW only)

Lines 1- 5 - Lost Time due to Sickness and Accidents and Incidence of Occupational Ill Health

In 2009/10 financial year NI Water lost a total of 10873 working days due to sickness which was equivalent to 7.8 working days per employee. The KPI for attendance in 09/10 was 95.7% and NI Water delivered an actual attendance rate of 96.5 %, 0.8% above the target, and an increase of 1.2% attendance on the previous year.

During 2009/10 NI Water underwent further restructuring which resulted in 76 employees leaving through a voluntary early severance/retirement (VER/VS) package.

NI Water has introduced a new Attendance Management policy in consultation with the trade unions. HR Advisors in conjunction with Line Managers have been meeting with staff that has breached sick absence trigger points to highlight the importance of good attendance. During the 09/10 year Human Resources have continued to work in partnership with Line Managers, the NI Water Employee Support Officer, Independent Occupational Health, Carecall (our counselling provider) and employees to assist those on long term sick to return to work and to facilitate reasonable adjustments where required. The main reason for staff being absent with work related stress focused around the changes in working practices and new technology.

Industrial employees have been attending yearly medical assessments where they are assessed for Hand Arm Vibration, Audio and working in confined spaces. NI Water also provides medical assessment for driving and HGV which is currently carried out by Independent Occupational Health.

NI Water reason for absence reporting differs to the occupational reasons as listed by the Utility Regulator. Our current reporting systems do not specifically record Hand Arm Vibration or work related reasons for absence. In addition to this work related stress is recorded under the general heading of anxiety/stress/depression.

Line 6 – Total RIDDOR Incidents

The NIW procedure for reporting accidents and incidents is set out in Procedure PRO 008 within the NIW H&S Manual, revised October 2009. All accidents and incidents must be reported with 24 hours by line management. A new and independent electronic Risk Reporting System, capable of “tracking accidents” was tested in the latter part of 2008/09 and has now replaced the former labour intensive system, commencing on 1 April 2009.

It is the relevant Line Manager’s responsibility to ensure all accident details are recorded on DATIX and also in the HSENI prescribed Accident Book. All accidents, incidents and near misses are examined by the H&S Team to facilitate transferable learning and to ensure accident statistics are collated centrally for analysis by the Health & Safety Manager

Datix entries are examined by the H&S Team and statistical trends are presented monthly by the Head of H&S both at Executive Level and at Board for comment and query.

There were 11 RIDDOR reportable incidents within NIW in 2009/10 and all of these related to more than 3-day accident-related absences.

Line 7 – RIDDOR Rate per 1000 employees
The DATIX process, as described for Line 6 above, provides the total number of RIDDOR incidents while the denominator, the total number of employees has been calculated within the HR Directorate (ref. Line 1, Table 41) as 1388. This gives the RIDDOR rate per 1000 employees as 7.93 for 2009/10.

Line 8 – 3 day accident Rate per 1000 employees
As all the RIDDOR incidents refer to accident-related absence (ref. line 6 commentary), the information in Line 8 mirrors that of Line 7.

Line 9 – Major Fatal accident Rate per 1000 employees
The information gathering process is again as described for Line 6 above and no fatal injuries occurred in 2008/09.

Lines 10 – 14 - Contractors' Lost Time
Contractors are engaged in a wide range of work across NIW. However, core activity, from a Health and Safety perspective relates only to the assistance given by contractors in relation to the provision of Water and Sewage services and currently includes contractors engaged in construction of new works (ref. line 15 commentary). NIW has, throughout 2009/10, been engaged in a rapid process of change, regarding the numbers of contractors assisting in the delivery of this core activity, as efficiency measures continue to be put in place,

Given the rapid change in contract provision as outlined above, NIW has no ready method of calculating the number of contractors' staff engaged in core activity and this is unlikely to change in the short term.

The HSENI is conducting a public strategy review for its 20/20 Vision and future reporting requirements are likely to be influenced more by a requirement to focus on demonstrating pro-active measures rather than re-active outcome statistics.

There were 7 RIDDORS and 1 Dangerous Occurrence reported.

The Contractor's Dangerous Occurrence (Datix reference NIW192) was recorded on 19 August 2009 and reported to NIW EC and Board at their September meeting. It happened in Carrickfergus and involved a large crawler crane working over an existing water culvert at the rear of a commercial property. The culvert partially collapsed and the crane sank into the culvert causing its jib to swing and the hook block and chains went through the roof into an unoccupied office. The crane driver suffered only

superficial cuts and grazes and no member of the public was injured. The property was evacuated and the emergency services were in attendance. All construction work ceased pending full investigation and recovery of the crane. HSENI were notified immediately but decided not to visit the scene due to the incident report and the actions already taken on site.

Line 15 –Contractors' RIDDOR Reports
The NI public regards all work related with Water and Sewage services, including design and build work, to be closely associated with NIW. NIW, in turn, recognises its duty of care to all of its contractors as "Client", when they are carrying out any works, and therefore see its duty as one of "leadership". NIW therefore keeps a record of all contractor and subcontractor "incidents", which will include any incidents relating to transient workers. NIW encourages the reporting of "near-misses" by contractors to facilitate shared learning experience.

All Contractor and subcontractor incidents are recorded on DATIX and for 2009/10 the total number of RIDDOR incidents reported to NIW by all of its contractors was 7. Contractor performance is monitored monthly by the NIW Executive Committee and Board at their monthly meetings.

Lines 16-17
Information is not collected for this line as NIW has no ready method of calculating the numbers of contractors' employees working on NIW contracts.

Lines 18
There were no major or fatal accidents connected with NIW's contractors or sub-contractors, including transient workers. This allows this rate to be calculated as zero.

Table 41 – Health and Safety Information (NIW only)

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Table 42

NORTHERN IRELAND WATER LIMITED - ANNUAL INFORMATION RETURN

ANNUAL INFORMATION RETURN- TABLE 42 KEY OUTPUTS
PPP SCHEMES
REPORTING YEAR 2009-2010

	DESCRIPTION	UNITS	DP	CG	Corresponding Report	Calculation	SCHEME	SCHEME	SCHEME	SCHEME	SCHEME	SCHEME	SCHEME	SCHEME	SCHEME	SCHEME	SCHEME	SCHEME	SCHEME	SCHEME	SCHEME	SCHEME	SCHEME	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL
A	**PROJECT DESCRIPTION**																											
1	PPP Concession	text	na		na		Alpha	Alpha	Alpha	Alpha	Alpha	Alpha	Alpha	Kinnegar	Omega	Omega	Omega	Omega	Omega	Omega	Omega	Omega	Omega	Alpha	Kinnegar	Omega	Water	Sewerage
2	Service Area	text	na		na		WT	WT	WT	WT	WD/WT	WD	WD	WWT	WWT	WWT	WWT	WWT	WWT	WWS	WWS	WWS	WWS	All	All	All	Service	Service
3	Name of works	text	na		na		Balinrees	Castor Bay	Dunore Point	Moyola	DBFO LM & FKd BDG Cont TK	Ballymoney LM	Limavady LM	Kinnegar	Richhill	Armagh	Ballynacor	North Down	Ballyrickard	Ballynacor Lagoons	Ballynacor	Duncrue	Sludge Service	Total	Total	Total	Total	Total
4	Commencement date	date	na		na		10-Oct-08	09-Dec-08	11-Dec-08	16-Sep-08	16-Dec-08	15-Oct-08	15-Oct-08	24-May-01	08-Apr-09	27-Aug-09	Not Yet Granted	05-May-08	20-Apr-09	N/A	Not Yet Granted	31-Mar-10	31-Mar-10					
5	Service duration	yrs	0		na		23	23	23	23	23	N/A	N/A	23	23	23	Not Yet Established	24	23	N/A	Not Yet Established	23	23					
6	Service completion date	date	na		na		30-May-31	30-May-31	30-May-31	30-May-31	30-May-31	N/A	N/A	23-Apr-24	07-Mar-32	07-Mar-32	07-Mar-32	07-Mar-32	07-Mar-32	07-Mar-32	07-Mar-32	07-Mar-32	07-Mar-32					
B	**PAYMENT TO PPP CONCESSIONAIRE**																											
7	Unitary Charge Capacity Charge	£m	3		na																							
8	Unitary Charge Variable	£m	3		na																							
9	Unitary Charge Deductions	£m	3		na																							
10	Atypical expenditure	£m	3		na																							
11	Efficiency Gains included in7-10	£m	3		na																							
12	Total PPP Payments (7to 10)	£m	3		na	Sum 7 to 10																						
13	Capital repayment	£m	3		na		0.396	0.781	0.843	0.315	0.203	0.166	0.202											2.906			2.906	
14	Maintenance	£m	3		na		0.025	0.066	0.092	0.041	0.000	0.000	0.000											0.224			0.224	
15	Residual interest	£m	3		na									0.232	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.232	1.933	0.000	2.165
16	Atypical payments capitalised	£m	3		na																							
17	Total capitalised (13 to 16)	£m	3		na	Sum 13 to 16																						
18	Total PPP Expensed (12-17)	£m	3		na	Lines 12-17																						
19	Interest	£m	3		na		1.545	3.043	3.284	1.227	0.792	0.648	0.786											11.325			11.325	
20	Total PPP Opex (18-19)	£m	3		na	Line 18-19																						
C	**WATER DISTRIBUTION DATA**																											
21	Distribution input	Mld	2	B2	Table 10 Line 26		27.02	102.16	119.47	14.80	N/A	N/A	N/A											263.45			263.45	
22	Length of mains	km	2	A1	Table 11 Line 12		N/A	N/A	N/A	N/A	16.42	N/A	N/A											16.42			16.42	
D	**WATER RESOURCE AND TREATMENT DATA**																											
23	Turbidity 95%ile greater or equal to 0.5NTU	1/0	0	A1	Table 11a Line 1		0	0	0	0	0	Not Tested	Not Tested															
24	Turbidity 95%ile less than 0.5NTU	1/0	0	A1	Table 11a Line 2		1	1	1	1	1	Not Tested	Not Tested															
25	Source Type	text		A1	Table 12 Block A		Impounding/River	River	River	River	N/A	N/A	N/A															
26	Treatment type	text		A1	Table 12 Block B		W4	W4	W4	W4	N/A	N/A	N/A											4 No. W4			4 No. W4	
27	Average pumping head	m	1	B4	Table 12 Block A		3.2	19.7	25.4	3.0	0.23	N/A	N/A											149.0			N/A	
E	**SEWERAGE DATA**																											
28	Total length of sewer	km	2	B2										0.00	0.09	0.20	11.51	10.40	1.00						0.00	10.40		10.40
29	Total length of critical sewer	km	2	B2										0.00	0.09	0.20	11.51	10.40	1.00						0.00	10.40		10.40
30	Population equivalent of total load received	000		B3	Table 17b line 2									90.082	2.150	30.717	133.866	72.750	40.533	N/A	N/A				90.082	280.016		370.098
31	Load received by STW's	kg BOD/day	0	B3	Table 17d									5405	129	1843	8032	4365	2432	N/A	N/A				5405	16801		22206
32	Suspended solids consent	mg/l	0	A1	Table 17b line 3									45/150	20/50	20/50	35/-	35/90	10/30	N/A	N/A							
33	BOD5 consent	mg/l	0	A1	Table 17b line 4									25/80	7/30	8/30	25/50	25/50	10/35	N/A	N/A							
34	COD consent	mg/l	0	A1	Table 17b line 5									125	125	125	125	125	125	N/A	N/A							
35	Ammonia consent	mg/l	0	A1	Table 17b line 6									N/A	2/10	2/10	7.5/32	N/A	N/A	N/A	N/A							
36	Phosphates consent	mg/l	0	A1	Table 17b line 7									N/A	N/A	<1 Ann Avg	<1 Ann Avg	N/A	N/A	N/A	N/A							
37	Classification of Treatment Works	text		A1	Table 17b line 8									SAS	TA1	TA2	TA2	TA2	TA2	N/A	N/A							
38	Size band of sewage treatment works	nr	0	A1	Table 17c									6	4	6	6	6	6	N/A	N/A							
G	**SLUDGE TREATMENT AND DISPOSAL DATA**																											
39	Total sludge imported from NI Water	ttds	3	B3										0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.610				0.000	0.610		0.610
40	Sludge produced by the PPP facility	ttds	3	B2										0.700	0.210	0.840	2.230	1.654	1.717	N/A	0.980	N/A			0.700	7.630		8.330
41	Sludge exported to Duncrue Incinerator	ttds	3											N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			0.000	0.000		0.000
42	Sludge exported to other PPP facilities	ttds	3	B2										0.000	0.020	0.110	0.250	0.000	0.000	0.000	0.000	N/A			0.000	0.380		0.380
43	Sludge exported to NI Water	ttds	3	B2										0.700	0.190	0.730	1.980	1.654	1.717	0.000	0.600	N/A			0.700	6.870		7.570
44	Sludge disposed of from site to - Farmland Untreated	ttds	3	A1	Table 17G Col 1									0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A			0.000	0.000		0.000
45	Sludge disposed of from site to - Farmland Convestiona	ttds	3	A1	Table 17G Col 2									0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A			0.000	0.000		0.000
46	Sludge disposed of from site to - Farmland Advanced	ttds	3	B2	Table 17G Col 3									0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.230	N/A			0.000	0.230		0.230
47	Sludge disposed of from site to - Incineration	ttds	3	A1	Table 17G Col 4									0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A			0.000	0.000		0.000
48	Sludge disposed of from site to - Landfill	ttds	3	A1	Table 17G Col 5									0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A			0.000	0.000		0.000
49	Sludge disposed of from site to - Composted	ttds	3	A1	Table 17G Col 6									0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A			0.000	0.000		0.000
50	Sludge disposed of from site to - Land Reclamation	ttds	3	A1	Table 17G Col 7									0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A			0.000	0.000		0.000
51	Sludge disposed of from site to - Other	ttds	3	B2	Table 17G Col 8									0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.150	N/A			0.000	0.150		0.150
52	Sludge disposed of from site - Total	ttds	3	B2	Table 17G Col 9									0.000	0.020	0.110	0.250	0.000	0.000	0.000	0.380				0.000	Meaningless Total		

Table 42 – Key Outputs PPP Schemes

Note: As the atypical expenditure in Alpha and the residual interest in Omega were not divisible by site the cross tots on lines 10, 12, 15, 17, 18 and 20 will not agree to the figures in the total column – the figures included in the total columns are correct for each concession

1. Changes To Data: This is a new Table designed to promote better understanding of the PPP works and draws its information from PPP sources. Consequently there is no commentary in respect of variations from the previous years data.

2. Amendments to Service Commencement Dates (Lines 4) No dates have been amended from those reported in the previous Reporting Period.

3. Adjustment to Contract Payment Mechanisms: These have not been adjusted from those in place in the previous Reporting Period (However, see also Line 11 Alpha commentary below).

4. Nature and Amounts Line:

Line 7 The Unitary Charge Capacity Charge applies to Alpha only. The data used is derived from the Invoices received from the Contractor, which separates the Unitary Charge Capacity Charge from the Unitary Variable Charge and the relevant Unitary Charge Performance Deductions, all in accordance with the Payment Mechanism Schedule of the Contract.

Line 8 The Unitary Charge Variable Charge applies to all three PPP Contracts. The data used is derived from the Invoices received from the Contractor which set out the Unitary Charge Variable Charge claimed. There are no payments in respect of the Ballynacor Sludge Facility and the Duncrue St Sludge Facility, rather a payment in respect of the Sludge Disposal Services.

Line 9 [redacted]

Alpha:
The Alpha Contractor, through engagement, invoices to the agreed amount which includes the relevant Performance Deductions. These Deductions are in accordance with the Payment Mechanism for failure events identified and can be separated by Facility (Scheme) as per the Payment Mechanism.

Omega:

[redacted]

Dispute:

[redacted]

[redacted]

To include them in Line 9 would be to double count and cause Line 20 to be at variance with the Company's audited accounts.

Kinnegar:

[redacted]

[redacted]

[redacted]

To include them in Line 9 would be to double count and cause Line 20 to be at variance with the Company's audited accounts.

Line 10
Alpha:

(a) Refund of Re-organisation costs: [redacted]

(d) Contractor Contribution to Alpha Official Opening (Launch) Sep 2009.

The official opening of the Alpha facilities cost £24k. The parties agreed to share the costs. A reduction of £12k was made in the monthly invoices from the Contractor to reflect the amount in favour of the Authority.

(e) Ex-gratia Payment relating to Dunore Boil Notice April 2009.

The Contractor offered an ex-gratia, without prejudice, payment to the Company to reflect costs it incurred as a result of the misrepresentative bacteriological sample causing the issuance of a precautionary boil notice April 2009. As there were no clear grounds for a Contractor breach, this was an appropriate means of reflecting its costs.

(f) Payments to other contractors arising from Boil Notice.

The Company incurred publishing costs of producing boil notices [redacted] and advertising [redacted] as an atypical cost and attributed this to the PPP cost code.

Omega:
(a) The Company had an opening accrual of [redacted] in respect of claims and beneficial use of sites not in Service but under the control, operation and Water Order Consent of the Contractor for the period 2008/09.

(b) Atypical Payments made during the year were as follows:

[redacted] – Costs incurred by the Contractor in cleaning up operational spills at the Ballynacor Existing Facilities during construction phase of the Works where the spillages were on areas under the CDM control of the Construction Sub contractor and not the Company.

[redacted] – Costs incurred by the Contractor in dealing with the transportation off site of pre-existing sludges at Ballyrickard WwTW at the time of Service Commencement, such costs that would otherwise have been for the account of NI Water as a Prudent Operator. [redacted]

[redacted]

[redacted]

[redacted]

Opening accrual [redacted]
Payments
Closing Provision
Total

The figure of [redacted] is therefore presented as;

Armagh Scheme (Facility): [redacted]
Ballynacor Scheme (Facility): [redacted]
Ballyrickard Scheme (Facility): [redacted]
Duncrue St Sludge Scheme (Facility): [redacted]

Kinnegar:
There is no atypical expenditure on this Concession Agreement

Line 11
There are no amounts shown for the reasons set out below;

Alpha: An Authority Change (the Lab Service Change) was instructed on Alpha to bring in house the Bacteriological sample analysis with a [redacted] reduction in Project costs but a [redacted] liability to the Company's monthly reduction in Unitary charge for the period of the Service. [redacted] This is not shown as efficiency as the effect on the Company is neutral. [redacted]

Omega: Only one site was in service for the period prior to the Reporting Period, limiting the opportunity for Contractor Notice of Change efficiencies. None were implemented.

Kinnegar: There is no efficiency mechanism in this contract

Line 13 Capital Repayments - the element of Alpha payments paying off the finance lease creditor. The data reconciles with the Company's financial accounts. This figure has been attributed to individual sites in proportion to the opening capital value recognised in the NIW accounts as follows:

	Opening Capital Value	Capital Repayment
	£m	£m
Castor Bay	30,015	0.781
Dunore Point	32,390	0.843
Ballinrees	15,238	0.396
Moyola	12,106	0.315
Limavady LM	7,750	0.202
Ballymoney LM	6,392	0.166
DBFO LM	7,817	0.203
	111,708	2,906

Line 14 Capital maintenance carried out at Alpha sites during the year – figure supplied by Dalriada Water.

Line 15 Residual Interest – as Kinnegar and Omega are off balance sheet an element of the unitary charge is capitalised to reflect residual value in NIW accounts at the end of the contract – figures taken from Contractors Financial Models. The total for Omega is not divisible by Facility (Scheme). The data reconciles with the Company's financial accounts.

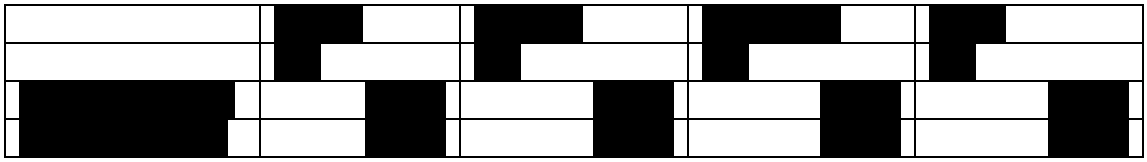
Line 16 Atypical payments capitalised – nil

Line 19 Interest
As Alpha is an on-balance sheet PFI contract the Company has recognised a finance lease creditor on its balance sheet - this figure represents the notional interest on the finance lease. The data reconciles with the Company's financial accounts. This figure has been attributed to individual sites in proportion to the opening capital value recognised in the NIW accounts as follows:

	Opening Capital Value	Interest
	£m	£m
Castor Bay	30,015	3,043
Dunore Point	32,390	3,284
Ballinrees	15,238	1,545
Moyola	12,106	1,227
Limavady LM	7,750	786
Ballymoney LM	6,392	648
DBFO LM	7,817	792
	111,708	11,325

The amounts disclosed in lines 12, 13,14,15,19 and 20 all agree to the figures disclosed in note 24 of the statutory accounts and so no further reconciliation is required.

A breakdown of the accruals included in the year end accounts in relation to unitary charges and disputed performance payments is as follows:



*excludes beneficial use accrual

Line 21 had been reported for AIR09 in Table 10 line 26. It should be noted that the DI for the DBFO Link Main is included in the Castor Bay DI and can not be separated.

Line 22 had been reported for AIR09 in Table 11 line 12 and has not changed in this submission.

Line 23 – 24 had been reported in Table 11a and will be compiled as per last year.

Lines 25 – 26 is the same information as for AIR09.

Line 27 has now been calculated for each Facility by the Contractor. This is new information being requested by the Regulator.

Lines 28 – 29 The North Down WwTW lengths are the same data as per AIR09. The additional information in relation to the other sites has been derived from Contractor records.

Line 30 now includes the additional facilities that have achieved Service Commencement.

Line 31 is defined by the Contractor in relation to Load received; this line now contains additional works as for line 30.

Lines 32 – 36 now contain the 95%ile and the Upper Tier compliance requirements for the relevant works.

Line 37 – 38 As per Lines 30 & 31.

Line 39 All other Northern Ireland Wastewater Sludges were disposed of by NI Water other than the amount attributed to disposal by Glen Water from Ballynacor Sludge Facility from 19 Feb – 31 March. Deducting the volumes disposed of by Glen Water from the facilities it was running (Indigenous sludge from Ballynacor, Armagh, and Richill) makes the balance 0.61 ttds disposed of from Ballynacor Sludge Facility.

Lines 40 This has been calculated by the Omega Contractor and by NI Water for Kinnegar on the basis of volume and dry solids content. The line total needs reconciliation in that 0.37 ttds was produced by the Armagh, Richhill and Ballynacor WWTW from 19 Feb – 31 March and dealt with in the Ballynacor Sludge Facility. It is therefore double counted in that disposal figure of 0.98ttds from the Ballynacor Sludge Facility.

Line 41 & Line 42 The PPP Duncrue St Facility was not in Service during the year. However, the Line 42 total of 0.37ttds reflects the amounts derived at Armagh, Richhill and Ballynacor WWTW that the contractor disposed of through his operation of the Ballynacor Sludge Facility over the period 19 Feb – 31 March.

Line 43: All PPP WWTW Sites exported to NI Water for disposal other than that produced at Armagh, Richhill and Ballynacor WWTWs for the period of 19 Feb – 31 March (see methodology).

Lines 44 – 52 the Company is reporting the data provided by Glen Water for its operation of the Ballynacor Sludge Facility for the period 19 Feb – 31 March, where Glen Water disposed of 0.98ttds through three outlets:

Incinerator No. 2 during testing and commissioning: 0.6ttds
Lime Stablisation for agri-use: 0.23ttds
Willow Coppicing: 0.15 ttds

Table 43

NORTHERN IRELAND WATER LIMITED - ANNUAL INFORMATION RETURN

ANNUAL INFORMATION RETURN- TABLE 43 KEY OUTPUTS
PPP REPORTING - OPERATIONAL COSTS
REPORTING YEAR 2009-2010

	DESCRIPTION	UNITS	DP	Corresponding Report	SCHEME	SCHEME	SCHEME	SCHEME	SCHEME	SCHEME	SCHEME	SCHEME	SCHEME	SCHEME	SCHEME	SCHEME	SCHEME	SCHEME	SCHEME	SCHEME	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL
A	**PROJECT DESCRIPTION**				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1	PPP Concession			na	Alpha	Alpha	Alpha	Alpha	Alpha	Alpha	Alpha	Kinnegar	Omega	Omega	Omega	Omega	Omega	Omega	Omega	Omega	Alpha	Kinnegar	Omega	Water	Sewerage
2	Service Area			na	WT	WT	WT	WT	WD/WT	WD	WD	WWT	WWT	WWT	WWT	WWT	WWT	WWS	WWS	WWS	All	All	All	Service	Service
3	Name of works			na	Balinrees	Castor Bay	Dunore Point	Moyola	DBFO LM & FBCT	Ballymoney LM	Limavady LM	Kinnegar	Richhill	Armagh	Ballynacor	North Down	Ballyrickard	Ballynacor Lagoons	Ballynacor	Duncrue	Total	Total	Total	Total	Total
B	**PPP INFORMATION**																								
4	Payment to Concessionaire	£m	3																						
5	Payment by Concessionaire to Operating Company	£m	3																						
C	**DIRECT COSTS TO NI WATER**								43.000																
6	Power	£m	3		0.328	2.604	2.997	0.524	0.020	N/A	N/A	N/A	0.051	0.085	0.000	0.795	0.178	N/A	0.000	0.000	6.473	0.000	1.109	6.473	1.109
7	Other direct costs	£m	3		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.001
8	Total direct costs	£m	3	sum 6 + 7	0.328	2.604	2.997	0.524	0.020	0.000	0.000	0.001	0.051	0.085	0.000	0.795	0.178	0.000	0.000	0.000	6.473	0.001	1.109	6.473	1.110
9	General and support expenditure	£m	3		0.034	0.034	0.034	0.033	0.033	0.033	0.033	0.042	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.234	0.042	1.040	0.234	1.082
10	Total functional expenditure	£m	3	sum 8 + 9	0.362	2.638	3.031	0.557	0.053	0.033	0.033	0.043	0.181	0.215	0.130	0.925	0.308	0.130	0.130	0.130	6.707	0.043	2.149	6.707	2.192
D	**OPERATING EXPENDITURE - NI WATER**																								
11	Scientific services	£m	3		0.000	0.000	0.000	0.000	0.000	N/A	N/A	0.046	0.002	0.002	0.002	0.002	0.002	0.000	0.000	0.000	0.000	0.046	0.011	0.000	0.056
12	Rates	£m	3		0.284	1.099	1.294	0.158	N/A	N/A	N/A	0.268	0.003	0.038	0.000	0.100	0.078	N/A	0.000	0.000	2.835	0.268	0.219	2.835	0.487
13	Estimated terminal pumping costs	£m	3									N/A	N/A	N/A	0.000	0.194	N/A	N/A	N/A	N/A		0.000	0.194		0.194
14	Estimated sludge costs	£m	3									N/A	0.000	0.000	0.000	0.000	0.000								
E	**TOTAL PPP OPERATING EXPENDITURE**																								
15	Total PPP operating expenditure	£m	3	Sum 5, 10, 11 and 12																					

Table 43 – Key Outputs

Note: As the Alpha atypical expenditure was not divisible by site the cross tot on line 4 for Alpha will not agree – the total included in the total column is correct for the Payments to the Concessionaire.

Introduction: This is a new Table prepared to enable easier reporting of the PPP Contract issues. The contents of this Table had in previous years been reported over a range of other Tables. Whilst the company has not previously completed this Table, the commentary below indicates where variances would have occurred from AIR 09 had such a table been reported previously

Line 4: Alpha: Payment to Concessionaire:
The data is derived from the Contractors Monthly Invoice and can only be split on a Site-by-Site basis and in each case represents the sum of the Unitary Charge payments (Capacity + Variable – Deductions) agreed with the Contractor.

[redacted]

It also includes;

Lab Service Change: [redacted]

[redacted]

Launch Contribution: A deduction of £12k from Unitary Charge to reflect the Contractors share of the costs incurred in the official opening event in September 2009.

Ex Gratia Payment: A without prejudice payment by the contractor to reflect NI Water's costs in dealing with the Boil Notice at Dunore Pt in April 2009 [redacted]

Refund of Re-organisation Costs. [redacted]

Capital maintenance of £224k has been deducted from the Alpha payments in arriving at the PPP opex figure as detailed in Table 42.

Line 4: Kinnegar: Payment to Concessionaire:
The data is provided as an aggregate of the monthly invoiced amounts by the Contractor to the Company.

Line 4: Omega: Payment to Concessionaire:
The data is provided as an aggregate of the monthly invoiced amounts by the Contractor to the Company in respect of the Services.

Line 5 – Alpha:
The data is as reported by the Contractor in respect of payments, excluding capital maintenance payments, to the Operating Contractor.

Variances from AIR09 reflect;

(i) variances in volumetric demand

Line 5 – Kinnegar:
The data is as extracted from the Concessionaires Invoices to the Authority.

Any variance from AIR 09 is in respect of the varying flows and loads and is not material.

Line 5 – Omega:
The data is as reported by the Contractor in respect of payments made to the Operating Contractor.

Variance from AIR09 reflect;

(i) Variances in flows received at North Down from the previous year
(ii) The additional sites for the Omega Contract entering Service in the course of the reporting period (Richhill, Ballyrickard, Armagh)

Line 6 – In respect of the Kinnegar Concession the Power costs are paid by the operating Company from the monthly payment from the Concessionaire. NI Water is unsighted in regard to this cost. The submission last year was estimated from bills submitted in relation to an operational claim.

In respect of Omega, last years report was in relation to North Down WwTW only whereas this year, other sites such as Ballyrickard, Armagh, Richhill and Ballynacor will be reported for at least partial years consumption. No change in the Alpha Site reporting.

Line 7 – No costs other than the cost of maintaining the Escrow agreement for Kinnegar

Line 9 – General and support costs have been arrived at by running a report on P101 cost centre. Costs were allocated by project on the basis of percentage time spent by each staff member working on each project and in the case of consultancy based on actual invoices received. Costs were then allocated straight line across the number of sites included within each concession. The revised methodology to include all Contracts Management Team costs and those of the PPP Advisory consultants reflects the more accurate figure in AIR10

Line 11 – Scientific services costs have been allocated to PPP sites on the basis of the percentage of samples attributable to each PPP site, an allocation of staff costs based on actual hours and operational contractor costs on the basis of estimated cost per site visit. Costs relate to more accurate recording of the Scientific Service costs attributable to Kinnegar and North Down recorded in AIR09, along with the addition of such costs for Richhill, Armagh and Ballyrickard in AIR10

Line 12 – Alpha
Rates at water supply sites are based on water volumes. In order to allocate a proportion of the rates bill to the Alpha sites the volume of water supplied at each PPP site was taken as a percentage of the total NIW water supplied and this figure was multiplied by the total NIW rates cost.

Line 12 – Kinnegar
Kinnegar rates charge was also taken directly from the Rates Bill.

Line 12 – Omega
The rates figure for Omega sites Richhill, Ballyrickard and Armagh were taken directly from the rates bills received from LPS and apportioned for part of the year where necessary. North Down was not included in the original 09/10 rates bill however has been included in a draft additional bill from LPS which was accrued at the year end. The figure for North Down agrees to the estimate from LPS.

Line 13 – TP Costs: This is the first year NIAUR have asked NI Water to provide this information. It is based on the relevant TPS associated with North Down only.

Line 14 – Sludge Costs – Nil for 2009/10.

Annual Information Return 2010

Section 3

Service Target Report

STR Table 1

NORTHERN IRELAND WATER- ANNUAL INFORMATION RETURN 2010

SERVICE TARGET REPORT - Table 1: Water Service

	DESCRIPTION	UNITS	DP	LAST KNOWN PERFORMANCE			2009-10 TARGET	2009-10 OUT TURN		2010-11 TARGET
				Reporting Year	Outurn	CG			CG	
A	**Providing adequate pressure**									
1	Percentage of NIW's connected properties experiencing inadequate pressure. (Where water pressure in a communication pipe fell below 7 metres static head on two occasions, each lasting not less than one hour, in a period of 28 consecutive days.)	%	2	N/A	N/A		None Set	N/A		None Set
2	Percentage of NIW's connected properties below the reference level of 10 metres head of pressure, at a flow of 9 litres per minute. (For ease of measurement NIW might adopt a surrogate pressure (usually 15 metres head) in the adjacent water main serving the property.)	%	2	2008-09	0.72	B4	0.60	0.27	B3	None Set
B	**Planned interruptions to water supply**									
3	Percentage of connected properties experiencing a planned interruption where the supply of water was not restored within the time period specified by NIW in its advance notice.	%	2	2008-09	2.37	B3	3.08	1.97	B3	1.62
4	Percentage of connected properties experiencing planned interruptions which lasted more than four hours, to whom NIW failed to provide adequate notification in writing at least 48 hours in advance.	%	2	2008-09	1.82	B3	5.43	0.74	B3	0.43
C	**Unplanned interruptions to water supply**									
	Percentage of connected properties experiencing unplanned interruptions to their water supply of greater than:									
5	3 Hours	%	2	2008-09	7.02	B3	6.10	6.01	B3	5.81
6	6 Hours	%	2	2008-09	1.02	B3	0.90	1.18	B3	1.00
7	12 Hours	%	2	2008-09	0.25	B4	0.23	0.46	B3	0.22
8	24 Hours	%	2	2008-09	0.08	B4	0.01	0.29	B3	0.01
9	Percentage of properties affected by an unplanned interruption due to a leak or burst on a strategic main, where the supply was not restored within 48 hours.	%	2	2008-09	1.92	B3	0.49	0.00	B3	0.44
10	Percentage of connected properties affected by an interruption (planned or unplanned) which lasted more than 24 hours who were offered alternative water supplies.	%	2	2008-09	100.00	B3	95.00	93.71	C4	97.50
D	**Water service (infrastructure)**									
11	Number of mains bursts (per 1000km of main).	Nr	2	2008-09	141.38	B3	174.00	146.85	B3	173.00
12	Percentage Mean Zonal Compliance with Prescribed Concentration/Value for Iron at the tap.	%	2	2008-09	98.24	A2	None Set	97.24	A2	97.80
E	**Water service (non-infrastructure)**									
13	Water treatment works coliform non-compliance	%	2	2008-09	0.08	A1	None set	0.08	A2	0.08
14	Number of provisional DWI (NI) enforcement notices at NIW's water treatment works.	Nr	0	2008-09	3.00	A1	None set	0	A1	None set
15	Number of final DWI (NI) enforcement notices at NIW's water treatment works.	Nr	0	2008-09	0.00	A1	None set	0	A1	None set
16	Number of provisional DWI (NI) enforcement notices at NIW's service reservoirs.	Nr	0	2008-09	0.00	A1	None set	0	A1	None set
17	Number of final DWI (NI) enforcement notices at NIW's service reservoirs.	Nr	0	2008-09	0.00	A1	None set	0	A1	None set
18	Percentage of water treatment works with leaving water turbidity samples 95%ile greater than or equal to 0.5 Nephelometric Turbidity Unit (NTU).	%	2	2008-09	14.29	A2	None set	23.33	A2	None set
19	Percentage of water treatment works with leaving water turbidity samples 95%ile below 0.5 Nephelometric Turbidity Unit (NTU).	%	2	2008-09	85.71	A2	None set	76.67	A2	None set
F	**Security of Supply.**									
20	Security of Supply Index Score (Planned).			2008-09	42	B4	44	88	A3	98
21	Security of Supply Index Score (Reference).			2008-09	42	B4	44	88	A3	98
22	Security of Supply Index Score (Critical).			N/C	N/C		None Set	N/A		None set
23	Band Achieved (Planned).			2008-09	D	B4	D	C	A3	B
24	Band Achieved (Reference).			2008-09	D	B4	D	C	A3	B
25	Band Achieved (Critical).			N/C	N/C		None Set	N/A		None set
	A: No deficit against target headroom (Score 100)									
	B: Marginal deficit against target headroom. (Score 90-99)									
	C: Significant deficit against target headroom. (Score 50-89)									
	D: Large deficit against target headroom (Score < 50)									
G	**Restrictions on water use**									
	Percentage of population served by NIW that has experienced water usage restrictions involving:									
26	Hosepipe Restrictions	%	2	2008-09	0.00	A1	None Set	0.00	A1	None Set
27	Drought Orders	%	2	2008-09	0.00	A1	None Set	0.00	A1	None Set
28	Sprinkler Restrictions	%	2	2008-09	0.00	A1	None Set	0.00	A1	None Set
29	Number of person weeks of hosepipe restrictions imposed by NIW over the reporting period	Nr	2	2008-09	0.00	A1	None Set	0.00	A1	None Set
H	**Leakage**									
30	Percentage compliance with preset leakage targets over a 3 year period (ML/d)	%	2	2008-09	180.93	B3	176.93	186.86	B2	173.00
I	**Drinking water quality**									
31	Mean Zonal Compliance (All parameters)	%	2	2008-09	99.49	A2	99.65	99.74	A2	99.70
32	Compliance with Drinking Water Quality Regulations (Taking account of ADs)	%	2	2008-09	99.66	A2	None set	99.73	A2	None set
33	Compliance with Drinking Water Quality Regulations (Not taking account of ADs)	%	2	2008-09	99.47	A2	None set	99.70	A2	None set
34	Mean Zonal Compliance with six parameter Operational Performance Indicator. (Iron, Manganese, Aluminium, Turbidity, Faecal Coliforms, Trihalomethanes.)	%	2	2008-09	97.07	A2	None set	98.70	A2	None set
35	Mean Zonal Compliance with Operational Performance Indicator (turbidity, iron and manganese)	%	2	2008-09	99.22	A2	99.10	98.90	A2	99.10

Service Target Report – Table 1: Water Service

Line 1 - Providing Adequate Pressure

Outturn

NIW is not currently in a position to report on the number of connected properties which received inadequate pressure below 7m static head on two occasions each lasting not less than 1 hour in a period of 28 consecutive days.

Performance Assessment

In order for NIW to set targets and report on this line it will be a requirement to provide comprehensive permanent pressure monitoring across the distribution network. Although this is not currently available, NI Water is continuing to identify critical point and surrogate logging locations across the network which will accommodate future permanent pressure monitoring. This work commenced during the reporting year and will continue throughout, and beyond, the forthcoming year. The longer term objective is to link continuous data from these sites to a corporate system to maximise the potential of this information and report on company performance. Appropriate software will need to be developed to achieve this.

Line 2 - Providing Adequate Pressure

Outturn

The following table provides a summary of the properties added and removed from the DG2 Register.

	No. of Properties
DG2 Properties at start of reporting period	**5770**
Additions due to better information	713
Reductions due to asset improvements – capital works	572
Reductions due to better information	3606
Reductions due to operational improvements	57
Allowable exclusions	94
Under investigation	1
DG2 Properties at end of reporting period	**2154**

Performance Assessment

The target set for 2009/10 was for the removal of 945 properties receiving inadequate pressure. This target was to be achieved through the validation of existing properties and their subsequent removal through better information as well as the removal of properties by company action through watermain rehabilitation schemes and operational improvements. In addition it was recognised that there could be additional properties to be added to the DG2 register based on better information from the logging programme. The target has been achieved with the removal of 3,616 properties. The number of reported properties on the Register represents 0.27% of total connected properties.

Line 3 - Planned Interruptions
Outturn
The percentage of connected properties experiencing a planned interruption where the supply of water was not restored within the time period specified by NIW in its advance notice is 1.97%.

The following table provides a summary of the numbers of properties that were issued a re-connection time for a planned interruption.

Interruption Types	**Properties Affected >6hrs**
Overruns of Planned and Warned	456
Planned and Warned	22,460
Planned re-classed as Unplanned (insufficient warning)	82
Planned re-classed as Unplanned (Actual Start before Planned Start)	20
Total number of customers experiencing a planned interruption *(from above)*	**23,123**
Percentage	**(456 / 23,123) x 100 = 1.972%**

Assumption: Unlike the guidance for STR: Table 1: Line 4 which clearly states that the assessment is to be based on interruptions lasting more than 4 hours, the guidance for this line provides no such indication. As this line relates to overruns of planned and warned interruptions and there is only an AIR: Table 2 requirement to report on overruns lasting more than 6 hours, NI Water has assumed that this assessment would also be based on interruptions lasting more than 6 hours.

Performance Assessment
Although NI Water has not introduced a Guaranteed Standards Scheme, the Company set a provisional target for 2009/10 of 3.08% and performance against this target was monitored internally on a monthly basis via reporting on the Customer Charter Scorecard until December 09. The outturn of 1.97% is within the provisional yearend target of 3.08% and less than the 2008/09 outturn of 2.37%.

2010/11 Target
At the time of completing AIR08, NI Water was asked to set targets for AIR09 and AIR10. The company based its targets on the AIR08 outturn and annual reductions of 10%.

As outturns are now available for three years (3.80%, 2.37%, 1.97%), the Company has decided to base its 2010/11 target on these outturns. The outturns were plotted on a graph and a “power” trendline was used to give a projected outturn for 2010/11 as this type of trendline was found to best fit the outturn profile. The equation of the trendline was found to be $y=0.0375x^{-0.606}$.

The equation was used to calculated a projected outturn and hence, 2010/11 target of **1.62**%.

Line 4 - Planned Interruptions
Outturn
The **percentage of connected properties experiencing planned interruptions which lasted more than four hours, to whom NIW failed to provide adequate notification in writing at least 48 hours in advance,** is 0.74%.

The following table provides a summary of the numbers of properties experiencing a planned interruption.

Interruption Types	**Properties Affected >4hrs**
Planned re-classed as Unplanned (insufficient warning)	297
Overruns of Planned and Warned	773
Planned and Warned	38,844
Planned re-classed as Unplanned (Actual Start before Planned Start)	125
Total number of customers experiencing a planned interruption *(from above)*	**40,039**
Percentage	**(297 / 40,039) x 100 = 0.742%**

Performance Assessment
Although NI Water has not introduced a Guaranteed Standards Scheme, the Company set a provisional target for 2009/10 of 5.43% and performance against this target was monitored internally on a monthly basis via reporting on the Customer Charter Scorecard until December 09. The outturn of 0.74% is within the provisional yearend target of 5.43% and less than the 2008/09 outturn of 1.81%.

2010/11 Target
At the time of completing AIR08, NI Water was asked to set targets for AIR09 and AIR10. The company based its targets on the AIR08 outturn and annual reductions of 10%.

As outturns are now available for three years (6.71%, 1.81%, 0.74%), the Company has decided to base its 2010/11 target on these outturns. The outturns were plotted on a graph and a “power” trendline was used to give a projected outturn for 2010/11 as this type of trendline was found to best fit the outturn profile. The equation of the trendline was found to be $y=0.0684x^{-1.992}$. The equation was used to calculated a projected outturn and hence, 2010/11 target of **0.43**%.

Line 5 - Unplanned Interruptions
Outturn
The **percentage of connected properties experiencing unplanned interruptions to their water supply of greater than 3 hours** is 6.01%.

The following table provides details of the outturns for the last three years together with the corresponding yearend targets.

Time Band	Outturn		Outturn		Outturn		08/09 KPI Target	09/10 KPI Target
	07/08 Props	07/08 %	08/09 Props	08/09 %	09/10 Props	09/10 %		
>3hrs	60,662	7.583%	55,984	6.962%	47,970	6.006	6.80%	6.10%

Note: Percentage outturns are based on total connected properties as follows: 800,018 (AIR08); 804,418 (AIR09); 798,740 (AIR10)

Note: NI Water completed a Service Target Report for the first time in 2008 and as a result, a target was not set for 2007/08.

Performance Assessment
Although NI Water has not introduced a Guaranteed Standards Scheme, the Company set a provisional target for 2009/10 of 6.10%. The outturn of 6.01% is within the provisional yearend target of 6.10% and less than the 2008/09 outturn of 6.96%.

2010/11 Target
At the time of completing AIR08, NI Water was asked to set targets for AIR09 and AIR10. The company based its targets on the AIR08 outturn and annual reductions of 10%.

As outturns are now available for three years (7.58%, 6.96%, 6.01%), the Company has decided to base its 2010/11 target on these outturns. The outturns were plotted on a graph and a “power” trendline was used to give a projected outturn for 2010/11 as this type of trendline was found to best fit the outturn profile. The equation of the trendline was found to be $y=0.0769x^{-0.2018}$. The equation was used to calculated a projected outturn and hence, 2010/11 target of **5.81**%.

Lines 6 to 8 - Unplanned Interruptions

Outturn

The **percentages of connected properties experiencing unplanned interruptions to their water supply of greater than 6 hours, 12 hours and 24 hours** are 1.18%, 0.46% and 0.29% respectively.

The following table provides details of the outturns for the last three years together with the corresponding year end targets. >6hr and >24hr targets were set for the first time in 2007/08.

Interruption Category		**Outturn** 2007/08 Props	**Outturn** 2007/08 %	07/08 KPI Target	**Outturn** 2008/09 Props	**Outturn** 2008/09 %	08/09 KPI Target	Outturn 2009/10 Props	Outturn 2009/10 %	09/10 KPI Target
>6hrs	U/P	9,483	1.185%		8,115	1.009%		9,427	1.180%	
	UTP	510	0.064%		96	0.012%		499	0.062%	
	O/R	835	0.104%		590	0.073%		452	0.057%	
	Total	**10,828**	**1.353%**	**2.0%**	**8,801**	**1.094%**	**1.2%**	**10,378**	**1.299%**	**1.0%**
>12hrs	U/P	1,839	0.230%		2,010	0.250%		3,675	0.460%	
	UTP	22	0.003%		33	0.004%		154	0.019%	
	O/R	99	0.012%		43	0.005%		118	0.015%	
	Total	**1,960**	**0.245%**	**0.25%**	**2,086**	**0.259%**	**0.15%**	**3,947**	**0.494%**	**0.15%**
>24hrs	U/P	72	0.009%		609	0.076%		2,294	0.287%	
	UTP	6	0.001%		4	0.000%		0	0.000%	
	O/R	0	0.000%		8	0.001%		1	0.000%	
	Total	**78**	**0.010%**	**0.03%**	**621**	**0.077%**	**0.01%**	**2,295**	**0.287%**	**0.01%**

Note: Percentage outturns are based on total connected properties as follows: 800,018 (AIR08); 804,418 (AIR09); 798,740 (AIR10)
Note: Targets excluding third party interruptions and overruns were not set for 2007/08 and 2008/09; the reason being that NI Water had already set alternative KPI targets for its Strategic Business Plan. These alternative targets included third party interruptions and overruns.

Performance Assessment
As NI Water did not set targets for 2008/09 excluding third party interruptions and overruns, the performance assessment will instead be based on its KPIs.

NI Water has three Key Performance Indicators relating to Supply Interruptions (DG3):-

"Number of properties experiencing unplanned and unwarned interruptions (expressed as a percentage of households) in excess of:

1a) 6 hours, 1b) 12 hours and 1c) 24 hours"

Note: The number of properties experiencing unplanned and unwarned interruptions includes interruptions caused by third parties and unplanned interruptions (overruns of planned interruptions).

Note: KPIs 1a and 1c were introduced for the first time in April 2007

>6hr KPI
The 2009/10 final outturn of 10,378 properties (1.299% of connected properties) exceeds the yearend target of 1.0%. The 2007/08 and 2008/09 final outturns were within the yearend targets although the targets were set higher at 2.0% and 1.2% respectively. As NI Water is keen to see a downward trend in the outturn, further reductions in targets are proposed.

>12hr KPI
The 2009/10 final outturn of 3,947 properties (0.494% of connected properties) exceeds the yearend target of 0.15%. The 2007/08 final outturn was within target but the 2008/09 final outturn also exceeded the target. Target failure in 2008/09 was mainly attributed to a small number of incidents involving higher than average numbers of properties and interruption durations. Target failure in 2009/10 can be largely attributed to the severe weather in December and January and also, the end of March.

Freeze/Thaw: There were 489 unplanned interruptions due to burst mains between 24 December 09 and 21 January 10 compared to 276 for the same period in 2008/09. This represents a 77% increase. 18 of the interruptions in 2009/10 lasted more than 6 hours compared to 4 in 2008/09 (350% increase). 7 of the interruptions in 2009/10 lasted more than 12 hours compared to 1 in 2008/09 (600% increase). As a result of the burst main incidents, 2,291 properties were affected for more than 6 hours (123 in 2008/09) and 101 properties were affected for more than 12 hours (9 in 2008/09).

In addition to the properties affected by unplanned interruptions due to bursts, properties were affected by pressure reduction caused by high demand on the system and an estimated 1,564 properties were affected by frozen communication pipes. The following table shows the impact of the freeze/thaw on the annual target allowance.

	Number of Properties Affected in Jan 10	Total Connected Properties	% Connected Properties Affected in Jan 10	Annual Target Allowance	% Annual Target Allowance Used
>6hrs	4,360	798,740	0.55%	1%	55%
>12hrs	1,857	798,740	0.23%	0.15%	155%
>24hrs	1,609	798,740	0.20%	0.01%	2,014%

>24hr KPI
The 2009/10 final outturn of 2,295 properties (0.287% of connected properties) exceeds the yearend target of 0.01%. The 2007/08 final outturn was within target but the 2008/09 final outturn also exceeded the target. Target failure in 2008/09 was mainly attributed to a small number of incidents involving higher than average numbers of properties and interruption durations. Target failure in 2009/10 can be largely attributed to the severe weather in December and January and also, the end of March.

Line 9 - Unplanned Interruptions
Outturn
The **percentage of properties affected by an unplanned interruption due to a leak or burst on a strategic main, where the supply was not restored within 48 hours** is 0.00%.

There were no interruption records in 2008/09 relating to trunk mains where the cause of the interruption was a burst main/main repair and the length of interruption exceeded 48 hours.

Interruption Types	**Properties Affected >4hrs**
Number of properties experiencing an unplanned interruption >48hrs	0
Number of properties experiencing an unplanned interruption >0hrs	4,085
Number of properties experiencing a third party interruption >0hrs	717
Total number of properties experiencing an unplanned interruption or third party interruption >0hrs *(from above)*	**4,054 + 717 = 4,771**
Percentage	**(0 / 4,771) x 100 = 0.00%**

Performance Assessment
Although NI Water has not introduced a Guaranteed Standards Scheme, the Company set provisional targets for 2008/09 and 2009/10 of 0.55% and 0.49% respectively and these targets continue to be monitored internally on a monthly basis via reporting on the Customer Charter Scorecard. The outturn percentage of 1.92% exceeds the yearend target of 0.55%. The 2007/08 outturn percentage was 0.00%.

2010/11 Target
At the time of completing AIR08, NI Water was asked to set targets for AIR09 and AIR10. The company based its targets on the AIR08 outturn and annual reductions of 10%.

Although outturns are now available for three years (0.00%, 1.92%, 0.00%), they are unsuitable for establishing a trend. Therefore, the Company has decided to continue with its basis for setting targets for AIR09 and AIR10.

AIR10 Target = 0.49%; AIR11 Target = 0.49% - 0.049% = **0.44%**

Line 10 – Alternative Water Supplies
The following table provides a summary of the OMIS and E&P interruption records in 2008/09 where the length of interruption exceeded 24 hours. There were 33 records in total.

Month	Interrupt Number	Type of Interruption	No. of Properties >24hrs	Length of ITS (hrs)	Alternate Supplies
May 09	9327	Unplanned	1	27.5	Bottled Water
	E&P059	Overrun	1	33.5	Bottled Water
Jun 09	9518*	Unplanned	12	26	Bottled Water
	9505	Unplanned	5	38	Bottled Water
Oct 09	10452	Unplanned	29	39.25	Bowser
Nov 09	10570	Unplanned	2	28	None Requested
	10915	Unplanned	10	33.5	None Requested
Dec 09	11144*	Unplanned	20	36.5	None Requested
	11698	Unplanned	18	47.5	Bottled Water
	11700	Unplanned	180	60	Bottled Water
	11699	Unplanned	50	99.75	Bottled Water
	11142*	Unplanned	30	104.5	Bottled Water
	10990	Unplanned	41	126	Bottled Water & Bowser
	11697	Unplanned	40	175	Bottled Water
Jan 10	11723	Unplanned	6	25	None Requested
	11600	Unplanned	30	157.5	Bottled Water & Bowser
	11596*	Unplanned	9	193.25	Bottled Water & Bowser

Month	Interrupt Number	Type of Interruption	No. of Properties >24hrs	Length of ITS (hrs)	Alternate Supplies
Mar 10	12076	Unplanned	2	24.25	None Requested
	12467	Unplanned	21	37.5	None Requested
	12456	Unplanned	9	38.5	None Requested
	12207	Unplanned	38	39.25	None Requested
	12209	Unplanned	15	39.25	None Requested
	12461	Unplanned	8	43.5	None Requested
	12464	Unplanned	5	53.5	None Requested
	12212	Unplanned	21	53.75	None Requested
	12214	Unplanned	20	53.75	None Requested
	12468	Unplanned	59	54	None Requested
	12453	Unplanned	3	72.5	None Requested
	12215*	Unplanned	5	78	Bottled Water
	12457	Unplanned	5	78.5	None Requested
	12455	Unplanned	10	81	None Requested
	12460	Unplanned	25	91.25	None Requested
	12216	Unplanned	1	142	None Requested
TOTAL			**731**		

* Note: Records 11144, 11142 and 12215 were checked as complete before the alternate supplies field had been completed. The alternate supplies field was confirmed via phone call instead. Records 9518 and 11596 were confirmed via e-mail for the same reason.

Within NI Water, the Networks Water and Leakage functions use an input screen to record their DG3 information. This input screen has a facility for specifying whether or not alternate supplies were provided by the Company during an interruption.

Although the alternate supplies field is not included amongst the data fields extracted from OMIS and used to compile the DG3 Register, it has been possible to revisit the input screens of the OMIS records in order to establish this information.

E&P and CSD use a MS Excel spreadsheet template to record their DG3 information. This template includes a column for recording alternate supplies.

In the case of 14 of the 33 OMIS and E&P interruptions lasting more than 24 hours in 2009/10, alternative water supplies were provided to customers in the form of bottled water and/or bowser.

In the case of Interrupt Numbers 11723 and 12076, the Company was aiming to have supplies restored within 24 hours.

In the case of Interrupt Numbers 10570, 10915 and 11144, bottled water was not supplied. There were no requests for bottled water on Rapid Xtra.

In the case of the remaining interruptions, bottled water was not supplied. There were no requests for bottled water on Rapid Xtra. The Company was reliant on assurances from NIE that supply would be restored.

In December and January, a further 1,564 properties experienced an interruption lasting longer than 24 hours as a result of frozen communication pipes. And 2,160 properties experienced an interruption lasting longer than 24 hours as a result of frozen supply pipes. All of these properties received alternative supplies, amounting to 40-50,000 litres of water.

- 451 properties were offered alternative water supplies (OMIS & E&P records).
- 280 properties did not request alternative water supplies (OMIS & E&P records).
- 3,724 properties received alternative supplies because of frozen communication/supply pipes.

$$451 + 280 + 3{,}724 = 4{,}455$$

- 4,455 connected properties were affected by an interruption which lasted more than 24 hours (including 2,160 properties affected by frozen supply pipes, not included in the summation of AIR10 Table 2 Lines 8, 12, 16 & 19).

((4,455 – 280) / 4,455) x 100 = **93.71%**

Outturn
The **percentage of connected properties affected by an interruption (planned or unplanned) which lasted more than 24 hours who were offered alternative water supplies** is 93.71%.

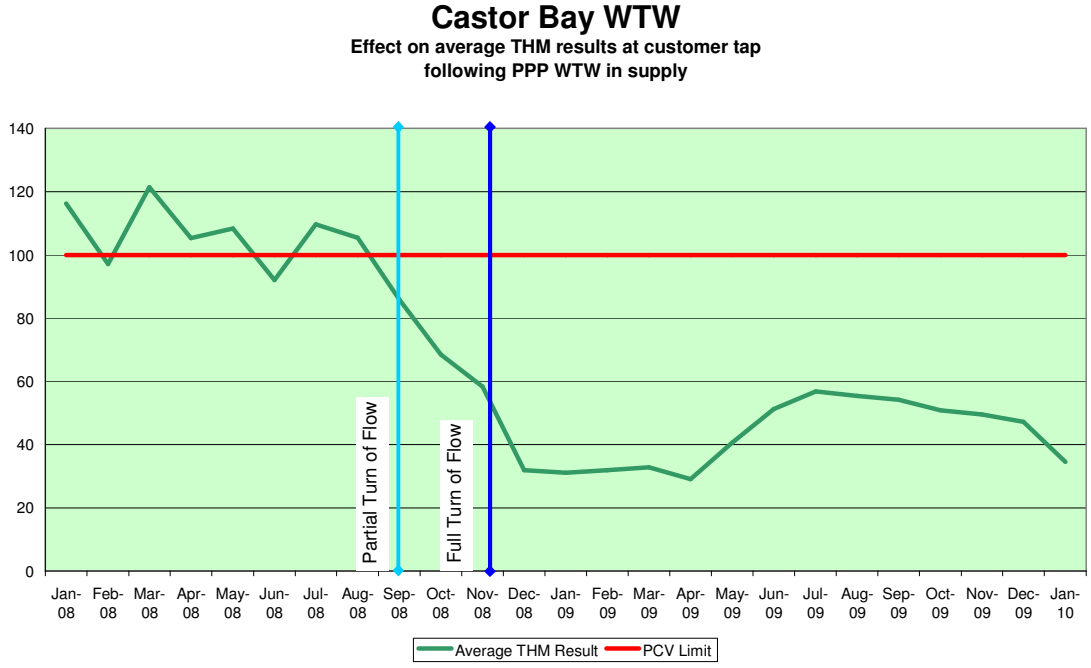
Performance Assessment
Although NI Water has not introduced a Guaranteed Standards Scheme, the company set a provisional target for 2009/10 of 95% and performance against this target was monitored internally on a monthly basis via reporting on the Customer Charter Scorecard until December 09. The outturn percentage of 93.71% is close to the yearend target of 95%. The 2008/09 outturn percentage was 100%.

2010/11 Target
At the time of completing AIR08, NI Water was asked to set targets for AIR09 and AIR10. The company based its targets on annual reductions of 5%, resulting in an AIR10 target of 95%.

The Company has decided on a 2010/11 target of **97.50%**.

Lines 12 – 19 and 21 – 35 – Water Service and drinking water quality
Background – Year on Year
The quality of water supplied by NI Water to customers has improved between 2008 and 2009:

- Mean Zonal Compliance has increased from 99.49% in 2008 to 99.74% in 2009 (NI Water assessed waiting for confirmation from DWI)
    - The increase in water quality is to a large extent due to a decrease in exceedances of the Total Trihalomethane parameter as the new Public Private Partnership (PPP) sites came into service. As a comparison, during 2008 NI Water had 141 THM exceedances. In 2009 this reduced to 30. See example graph for Castor Bay WTW below:



- The Operational Performance Index (for NI Water based on turbidity, iron and manganese as agreed with the Drinking Water Inspectorate (DWI)) decreased from 99.22% in 2008 to 98.90% in 2009 (NIW assessment on Turbidity, Iron and Manganese). This is largely due to a number of samples which engendered simultaneous exceedances in all 3 parameters.

- The percentage compliance measured at Water Treatment Works (WTWs) decreased from 99.95% in 2008 to 99.92% in 2009.

- The percentage compliance measured at Service Reservoir (SR) decreased slightly from 99.93% in 2008 to 99.92% in 2009.

- Overall out of 235,468 measurements (directive standards, national standards, indicator parameters and additional monitoring requirements) made at customer tap, WTWs, SRs and Authorised Supply Points, 99.90% met the standards.

Please note a total re-zoning exercise was carried out for 2009 based on more accurate DMA data. The new 2009 Water Supply Zones are not

contiguous with the previous zones, and as such have been given new codes and names, with the codes reflecting the leakage supply areas, and the names reflecting the supplying WTW / SR and the major conurbation in the zonal area.

Authorised Departures Discussion

- Authorised Departures – NI Water had a number of authorised departures in place during 2009 (details below). The AD end date is the date authorised by DWI, being one year after the completion of the programme of work to allow commissioning. The ADs listed are at zonal level, and are derived from the original supplying WTW authorisations (available if required) apart from 1 pesticide AD which was applied at the authorised supply point as this was the point of measurement. Further ADs may be applied for in the future if required by DWI. In the table below, those zones where the AD had expired by the 31st December 2009 are highlighted in yellow, with the remaining zones with active ADs highlighted in green.

2009 ADs by Water Supply Zone/Authorised Supply Point with AD End

Site Code	Site Name	Parameter	Units	AD Value	AD Start	AD End	Active at year end
ZN0501	Moyola Magherafelt	Total Trihalomethanes	ug/l	150	01/01/2007	16/07/2009	No
ZN0503	Unagh Cookstown	Total Trihalomethanes	ug/l	150	01/01/2007	16/07/2009	No
ZS0502	Forked Bridge Dunmurry	Total Trihalomethanes	ug/l	150	01/01/2007	24/09/2009	No
ZS0503	Forked Bridge Stoneyford	Total Trihalomethanes	ug/l	150	01/01/2007	24/09/2009	No
ZS0801	Castor Bay Ardress	Total Trihalomethanes	ug/l	150	01/01/2007	24/09/2009	No
ZS0802	Castor Bay Lurgan	Total Trihalomethanes	ug/l	150	01/01/2007	24/09/2009	No
ZS0803	Castor Bay Portadown	Total Trihalomethanes	ug/l	150	01/01/2007	24/09/2009	No
ZN0303	Dunore Point Ballymena	Total Trihalomethanes	ug/l	150	01/01/2007	15/10/2009	No
ZN0401	Dunore Point Antrim	Total Trihalomethanes	ug/l	150	01/01/2007	15/10/2009	No
ZS0101	Belfast Ballygomartin North	Total Trihalomethanes	ug/l	150	01/01/2007	15/10/2009	No
ZS0102	Belfast Ballygomartin South	Total Trihalomethanes	ug/l	150	01/01/2007	15/10/2009	No
ZS0103	Belfast Ballyhanwood	Total Trihalomethanes	ug/l	150	01/01/2007	15/10/2009	No

Site Code	Site Name	Parameter	Units	AD Value	AD Start	AD End	Active at year end
ZS0104	Belfast Breda North	Total Trihalomethanes	ug/l	150	01/01/2007	15/10/2009	No
ZS0105	Belfast Breda South	Total Trihalomethanes	ug/l	150	01/01/2007	15/10/2009	No
ZS0106	Belfast North	Total Trihalomethanes	ug/l	150	01/01/2007	15/10/2009	No
ZS0107	Belfast Oldpark	Total Trihalomethanes	ug/l	150	01/01/2007	15/10/2009	No
ZS0108	Belfast Purdysburn	Total Trihalomethanes	ug/l	150	01/01/2007	15/10/2009	No
ZS0110	Dunore Point Glengormley	Total Trihalomethanes	ug/l	150	01/01/2007	15/10/2009	No
W2501	Altmore	MCPA	ug/l	0.5	22/11/2007	24/12/2009	No
ZN0901	Altmore Cabragh	Total Trihalomethanes	ug/l	150	01/01/2007	24/12/2009	No
ZN0902	Altmore Donaghmore	Total Trihalomethanes	ug/l	150	01/01/2007	24/12/2009	No
ZN1102	Seagahan Armagh	Total Trihalomethanes	ug/l	150	01/01/2007	24/12/2009	No
ZN0704	Lough Bradan Drumquin	Total Trihalomethanes	ug/l	150	07/08/2007	06/08/2010	Yes
ZN0706	Lough Macrory Killyclogher	Total Trihalomethanes	ug/l	150	07/08/2007	06/08/2010	Yes

The individual associated WTWs were assessed against both being in service at the end of the year and also the expiry of their Authorised Departure. This led to 7 WTWs being assessed with 6 sites being excluded from the calculation as highlighted here – sites in yellow are excluded, and the site in green included.

2009 WTWs affected by Authorised Departures

Site Code	Water Treatment Works	Ml/d	Out of service	AD Expiry	Included	Volume Ml/d
W1301P	Moyola	14.51		16/07/2009	No	
W2308P	Castor Bay	80.74		24/09/2009	No	
W2501	Altmore	3.74		24/12/2009	No	
W2514	Seagahan	10.92		24/12/2009	No	
W3301P	Dunore Point	119.40		15/10/2009	No	
W3315P	Forked Bridge	21.18		15/10/2009	No	
W4513	Lough Braden	8.32		06/08/2010	Yes	8.32
					Total affected DI	**8.32**

2009 ADS by Water Supply Zone showing population affected

Zone Code	Zone Name	Population	AD End	Affected by AD	Population Affected
ZN0303	Dunore Point Ballymena	28805	15/10/2009	No	0
ZN0401	Dunore Point Antrim	78060	15/10/2009	No	0
ZN0501	Moyola Magherafelt	55768	16/07/2009	No	0
ZN0503	Unagh Cookstown	15582	16/07/2009	No	0
ZN0704	Lough Bradan Drumquin	25398	06/08/2010	Yes	25398
ZN0706	Lough Macrory Killyclogher	21143	06/08/2010	Yes	21143
ZN0901	Altmore Cabragh	4636	24/12/2009	No	0
ZN0902	Altmore Donaghmore	8816	24/12/2009	No	0
ZN1102	Seagahan Armagh	39875	24/12/2009	No	0
ZS0101	Belfast Ballygomartin North	43929	15/10/2009	No	0
ZS0102	Belfast Ballygomartin South	41279	15/10/2009	No	0
ZS0103	Belfast Ballyhanwood	62934	15/10/2009	No	0
ZS0104	Belfast Breda North	48620	15/10/2009	No	0
ZS0105	Belfast Breda South	64924	15/10/2009	No	0
ZS0106	Belfast North	39223	15/10/2009	No	0
ZS0107	Belfast Oldpark	75546	15/10/2009	No	0
ZS0108	Belfast Purdysburn	44937	15/10/2009	No	0
ZS0110	Dunore Point Glengormley	36184	15/10/2009	No	0
ZS0502	Forked Bridge Dunmurry	63234	24/09/2009	No	0
ZS0503	Forked Bridge Stoneyford	26494	24/09/2009	No	0

Zone Code	Zone Name	Population	AD End	Affected by AD	Population Affected
ZS0801	Castor Bay Ardress	32363	24/09/2009	No	0
ZS0802	Castor Bay Lurgan	70380	24/09/2009	No	0
ZS0803	Castor Bay Portadown	74273	24/09/2009	No	0
				Total	**46541**
			All population		**2250260**
			Percentage affected		**2.068%**
			Percentage not affected		**97.932%**

Table Completion
As discussed in the methodology, the main numeric input for the STR Table 1 Lines 12-13 and 31-35 is based on NI Water's year end water quality report. This is produced and the figures agreed with DWI as soon as possible after year end.

The lines relating to Enforcement Notices at NI Water's various sites are completed by the Water Regulation section within the Environmental Regulation function. There is a considerable amount of correspondence and negotiation over the year between this section and DWI, and the figures reflect the outcome of such correspondence.

Confidence Grades
The confidence grades used in returns are based on OFWAT guidance documentation.

Lines 20 – 25 - Security of supply
As indicated in AIR09 NI Water is currently developing a water resource management plan. The security of supply index has been calculated based on this Draft 2010-2035 Water Resource Management Plan (DWRMP).

The new plan has adopted the latest methodology for producing water resource management plans and there has been a significant step change in the reported SOSI since 2008/09, which was 42, to the reported 88 for 2009/10. This is due to a number of reasons;

- A new approach for headroom (UKWIR (2002), *An Improved methodology for assessing Headroom*. Report 02/WR/13/2) used in the ongoing DWRMP has been utilized to assess the level of uncertainty in the supply demand balance. This methodology is more comprehensive than the previous approach and has reduced the level of uncertainty with regard to headroom which in turn has resulted in a lower headroom requirement than previous calculations for SOSI by NI Water.

- Revised Water Resource Zone (WRZ) boundaries that accurately reflect the current water supply situation within Northern Ireland. The 2002 water resource strategy had allowed for 15 water resource zones

but with various network improvements since 2002 the current plan has been able to identify a total of 5 independent water resource zones. Previous SOSI calculations have indicated an overall surplus of WAFU across Northern Ireland as a whole but the low SOSI score was more a reflection of the inherited system of many small individual water supply systems. Separate supply demand balances are constructed at WRZ level. Surpluses in one or more WRZs may then be available for transfer across WRZs boundaries to meet deficits. A number of changes have taken place since the 2002 WRS and the current review has enabled a detailed reassessment of the supply system and the 5 WRZs identified are an accurate reflection of the water supply system. As a result there are fewer isolated zones and the WAFU can be made available more easily across Northern Ireland.

- A Review of the outage allowance has resulted in a 1% reduction as compared to the 2002 WRS allowance. The assessment of outage for WRS 2002 was based on discussions with each of the four Water Service Divisions in existence at the time, but no historic outage data were available. A nominal outage allowance of 3% of distribution input was assumed. For WRMP 2010 a structured interview was held with key NI Water staff to develop an understanding of outage, identify sources most at risk from outage events, and where possible to quantify these risks. After these consultations the outage was revised to 2%, based on the latest information available and an element of expert judgement.

- Distribution Input has been reduced further 2008/09

As a result of the ongoing implementation of the 2002 Water Resource Strategy the latest assessment through the ongoing WRMP indicates a more integrated water supply system. When this is taken into account through an assessment of SOSI, NI Water is now a band C rating. With the planned implementation of the abstraction from the River Strule during 2010/11 and a further reassessment of the distribution of deployable output across water resource zones when the strategic model for trunk main flows becomes available as part of the WRMP project the improvement is expected to continue for 2010/11.

In accordance with best practice guidance for water resource planning, companies generally consider their supply demand balances under different planning scenarios. For each planning scenario a baseline forecast of supply and demand is produced.

The primary planning scenario for the WRMP is the **dry year annual average scenario (DYAA)**, which is defined by a period of low rainfall and unconstrained demand. This forms the basis of the WRMP, because the overall objective of the WRMP is to ensure that even under drought conditions, when supplies may be stressed, the level of demands associated with hot dry conditions can be met in full.

Some companies might also need to derive critical period scenarios, where their supply demand balance is sensitive to these because there are sustained periods when demands are significantly higher than average; this is a peak demand condition. Supply-side characteristics may also influence whether or not critical period analysis is required, for instance, where WRZs are supplied predominantly by groundwater, or by run of river abstractions with limited storage.

The supplies available to NI Water are dominated by abstractions from Lough Neagh, which can be considered an infinite hydrological storage resource. In addition, recent demand data does not suggest that there is a strong peak demand driver in Northern Ireland. For these reasons, it is not appropriate or necessary to consider the critical period scenario for Northern Ireland, because this is not the primary driver for investment to maintain the supply demand balance.

On this basis there has been no need for NI Water to develop a SOSI calculation for a critical period.

Lines 26 – 29 - Restrictions on water use
Drought orders are not applicable in N.I.

Under Article 36 of the Water and Sewerage Services (NI) Order 1973, when the Department for Regional Development is satisfied that a serious deficiency of supplies of water in any area exists or is threatened, it may make an order to prohibit or restrict the use of water for any purpose (or by means by which the water is used, i.e. hosepipe ban).

The Department may also by order abstract water from any source and suspend or modify any obligation governing the discharge of compensation water for a period not exceeding 6 months.

There were no restrictions placed on the use of water during the reporting year. The high reliability assessment (A1) is based on the established procedures for the making of any order to prohibit or restrict the use of water. The high accuracy grade reflects the fact that no orders were made during the reporting year.

Northern Ireland Water does not operate a sprinkler license system.

Future Reporting
Northern Ireland Water has yet to develop a series of revised DG4 procedures which will clarify the reporting requirements and definitions and the responsibilities of those involved in the reporting process.

Line 30 – Leakage

Introduction

The outturn figure for reconciled leakage for 2009/10 is 186.86 Ml/d. The previous year's value was 180.9 Ml/d. The primary factor for the increase in leakage was the impact of the 2010 winter freeze/thaw as well as some adjustment as a result of the adoption of company specific data and better information. Commentary in relation to the Leakage performance is detailed within the Table 10 returns.

The most significant issue was the adverse weather conditions encountered during the winter months. Met Office records indicate that the 2009/10 winter was the coldest since 1963 and the second coldest in the last 100 years. Temperatures plummeted as low as -13C at night and by day they struggled to rise above freezing which is highlighted by the high number of air frost days recorded.

The freezing conditions and subsequent thaw caused widespread disruption to the water distribution network with a high rise in the number of burst main and frozen pipe occurrences. NI Water has continued throughout 2009/10 with Phase 2 of the Water Balance Action Plan

Meanwhile NI Water has continued throughout 2009/10 with work in relation to the Water Balance Action Plan. As highlighted in AIR09 the scale of the work being undertaken is considerable. To date NI Water has established a number of company specific assessments. In particular the production of specific figures for household use and the hour to day factor increased the reported leakage estimate by approximately + 2 Ml/day.

Prior to the freeze/thaw NI Water were on target to achieve a reduction of 4.0 Ml/d over the 2009/10 year. However the impact of the extreme weather conditions was such that leakage levels increased significantly in January 2010. Despite the ongoing poor winter weather immediate action was taken to recover the leakage situation during the months of February and March 2010 and substantive gains were made. However the overall impact meant that there was an additional 3175 Ml of leakage, which equated to an additional 9.0 Ml/d of leakage (averaged across the 2009/10 year), as a result of the extreme winter weather conditions.

The combined effect of the winter freeze and the introduction of company specific assessments are estimated to have contributed an additional + 11 Ml/day resulting in a reported leakage estimate of 186.8 Ml/day.

Phase I of the Water Balance Action Plan had the impact of rebasing reported leakage for AIR09 to a figure of 180.9 Ml/day. This revised estimate was audited by the Reporter and subsequently adopted by NIAUR for the establishment of targets throughout the PC10 period.

STR Table 2

NORTHERN IRELAND WATER- ANNUAL INFORMATION RETURN 2010

SERVICE TARGET REPORT - Table 2: Sewerage Service

	DESCRIPTION	UNITS	DP	LAST KNOWN PERFORMANCE			2009-10 TARGET	2009-10 OUT TURN		2010-11 TARGET
				Reporting Year	Outurn	CG			CG	
A	**Sewer flooding**									
1	Percentage of connected properties experiencing internal flooding from NIW's sewers.	%	2	2008-09	0.00	B4	None Set	0.00	B4	None Set
2	Percentage of connected properties internally flooded due to overloaded NIW sewers.	%	2	2008-09	0.00	B4	None Set	0.00	B4	None Set
3	Percentage of flooding incidents attributable to severe weather.	%	2	2008-09	0.00	B4	None Set	0.00	B4	None Set
4	Percentage of properties internally flooded due to other causes.	%	2	2008-09	0.00	B4	None Set	0.00	B4	None Set
	Percentage of NIW's connected properties ***at risk*** of internal flooding due to the incapacity of NIW's sewers:									
5	Once in every ten years.	%	2	2008-09	0.12	D6	None Set	0.12	DX	None Set
6	Twice or more in every ten years.	%	2	2008-09	0.01	DX	None Set	0.00	DX	None Set
7	Once in every twenty years.	%	2	2008-09	0.00	DX	None Set	0.00	DX	None Set
B	**Sewerage service (infrastructure)**									
8	Sewer collapses per 1000km of sewer.	Nr	2	2008-09	96.30	C5	None Set	68.70	B3	None Set
C	**Sewerage service (Non-infrastructure)**									
9	Percentage population equivalent (pe) served by NIW STWs that do not comply with the conditions of their discharge consents for sanitary determinands, phosphorus determinands and disinfection conditions.	%	2	2008-09	9.55	A2	6.50	7.50	A2	None Set
10	Percentage of sewage sludge NIW disposed of in an unsatisfactory manner.	%	2	2008-09	0.00	A1	0.00	0.00	A1	0.00
D	**Sewerage Service Serviceability Indicators**									
	Sub-threshold indicators of forecast:									
11	(i) biochemical oxygen demand (BOD) (Max > 2)	%	2	2008-09	92.64	A2	None Set	68.95	A2	None Set
12	(ii) biochemical oxygen demand (BOD) (95%ile > 1)	%	2	2008-09	88.80	A2	None Set	65.41	A2	None Set
13	(iii) biochemical oxygen demand (BOD) (Mean > 0.5)	%	2	2008-09	87.92	A2	None Set	65.72	A2	None Set
14	(iv) suspended solids (SS) (Max > 2)	%	2	2008-09	93.83	A2	None Set	70.10	A2	None Set
15	(v) suspended solids (SS) (95%ile > 1)	%	2	2008-09	90.84	A2	None Set	67.59	A2	None Set
16	(vi) suspended solids (SS) (Mean > 0.5)	%	2	2008-09	90.51	A2	None Set	68.62	A2	None Set
17	(vii) ammonia (NH3) (Max > 2)	%	2	2008-09	92.80	A2	None Set	71.02	A2	None Set
18	(viii) ammonia (NH3) (95%ile > 1)	%	2	2008-09	89.05	A2	None Set	66.71	A2	None Set
19	(ix) ammonia (NH3) (Mean > 0.5)	%	2	2008-09	94.47	A2	None Set	72.45	A2	None Set
E	**Wastewater quality**									
	Wastewater treatment works serving greater than 250 population equivalent not achieving compliance with Water Order Consents expressed as a:-									
20	(i) percentage of works.	%	2	2008-09	9.40	A2	13.00	8.14	A2	15.00
21	(ii) percentage of population equivalent.	%	2	2008-09	9.40	A2	6.50	6.20	A2	5.20
	Wastewater treatment works not achieving compliance with Urban Waster Water Treatment Directive (UWWTD) Consents expressed as a:-									
22	(i) percentage of works.	%	2	2008-09	7.80	A2	8.00	7.10	A2	10.10
23	(ii) percentage of population equivalent.	%	2	2008-09	9.70	A2	None Set	2.40	A2	None Set
24	Percentage compliance with Urban Waste Water Treatment Directive (UWWTD) consent standards for Biochemical Oxygen Demand (BOD).	%	2	2008-09	93.51	A1	None Set	94.37	A2	None Set
25	Percentage compliance with NIEA phosphorous targets at phosphorous removal sites.	%	2	2008-09	100.00	A1	None Set	100.00	A2	None Set

Service Target Report - Table 2: Sewerage Service

Lines 1 to 4 – Sewer flooding

As yet, no service targets have been set for Table 2: Lines 1 to 4 of the Service Target. This situation will be reviewed during the course of the reporting year when meaningful targets may be able to be established.

Lines 5 to 7 – Properties 'at risk' of flooding

As yet, no service targets have been set for Table 2: Lines 5 to 7 of the Service Target Report because these targets depend on the information reported through the three DG5 'At Risk' Registers and these registers are still being developed.

NIW had a target to investigate and make an initial determination of all internal flooding records as either DG5 Reportable or DG5 Excluded by October 2008. It is NIW's intention to wait until additional investigations are carried out on these determinations before setting targets based on information reported through the three DG5 'At Risk' Registers.

By delaying the setting of targets, NIW will have a more accurate understanding of the expected annual numbers of reportable incidents and hence, the numbers of properties that NIW could realistically expect to remove from the registers through the Capital Works Programme.

DG5 Register Development 2010 onwards.

As stated NIW's' Flooding register is still at the development stage with only partial reporting capability. It is our aim to move towards full flooding reporting capability.

To achieve this aim NIW have created a DG5 expert panel comprised of key personnel. Initially, the role of the DG5 panel is to provide a forum in which all areas of the business can feed into the flooding register development exercise for both internal and external flooding. However, as the Flooding Register and supporting business processes develop, the focus of this panel will shift to agreeing additions to and removals from the DG5 register, while ensuring the business process is maintained at all levels.

NIW are currently agreeing a programme for the development of the Flooding register along with methodologies, processes, definitions and roles and responsibilities.

NIW will work towards full reporting capability for both internal and external flooding incidents before the end of the PC10 period.

Line 8 – Sewer collapses

Information for the AIR10 return for this line was gathered as AIR09 for the lines on Table 16a, Line 1 – Number of Rising Main Failures, Line 2 – Number of Gravity Sewer Collapses and Line 3 – Number of Sewer Blockages should be gathered by Field Managers using checked and paid invoices from the

Sewer Maintenance Contractor and submitted through their line management (Area Managers) as per Line Specific Methodology.

Work has progressed during the year to identify critical and lateral sewers; these layers have been recently added to NIW's Corporate Asset Register. Work is also progressing on identifying sewer repairs as a result of CCTV surveys. Because of this work NIW should be in a better position for AIR11 to report on whether collapses or blockages have occurred in a private lateral, public lateral or public main sewer.

Line 10 - The percentage of unsatisfactory sludge disposal

Northern Ireland Water (NIW) continues to have zero unsatisfactory sludge disposals.

NIW has again assigned a confidence grade of A1 to percentage unsatisfactory sludge disposal as the total is zero.

NIW remains committed to compliance with the requirements of the "Safe Sludge Matrix". Greater than 40% of all sewage sludge disposed in 2009/10, approximately 42.08%, was recycled to agricultural farmland (lime stabilisation) i.e. Farmland Advanced.

A total of 7.02% of sewage sludge was disposed of in 2009/10, to land reclamation at various sites in mainland G.B. i.e. Land Reclamation disposal.

Regulation by NIEA within Northern Ireland permitted the safe disposal of sludge cake to forestry during 2009/10 and has been recorded with disposal to willows as "Other" at 4.26%.

A small quantity of poor quality sludge cake was disposed of to landfill. The total estimated quantity of grit and screenings removed as part of the sewage treatment process and disposed of separately under Tender C018 (Collection, Transportation and Disposal of Waste by skip) has been collated for the available duration of the tender and subsequently added to the total quantity of sewage sludge disposed to landfill in 2009/10.

All other untreated sludge was disposed of to incineration (approx. 45%).

Note: The production of surplus sewage sludge cake when the incinerator is shut down for annual maintenance etc. requires the collection, transportation and disposal of sludge cake from the cake store to Farmland Advanced, Other (forestry & willow coppicing) and Land Reclamation. The quantity of sludge cake disposed of to these outlets from the Belfast incinerator has been captured monthly by the Area sludge officer.

NIW has assigned a confidence grade of B2 to total sludge disposal as the company has systems in place to record the volumes and the measured percentage dry solids.

Lines 11-19 – Sewerage service serviceability indicators
These lines are copied from Table 16b please refer to the commentary submitted for Table 16b.

1.1.1 Lines 9 and 20 – 25 - Sewerage service and wastewater quality

Introduction
The Northern Ireland Environment Agency (NIEA) issues Water Order Consents (WOC) which set out legally binding conditions under which discharges to the aquatic environment are permitted. NI Water has in the order of 1500 WOC covering all Waste Water Treatment Works (WWTW), Water Treatment Works and sewerage systems.

NIEA assesses compliance on a calendar year basis, with WOC conditions to give the "official" compliance figure. However to inform Management of progress on achieving Key Performance Indicators (KPI) and address any potential problems, monthly reports on progress are produced.
In 2009 the KPI's related to wastewater treatment performance were:

- The percentage of WWTW serving more than 250 Population Equivalent (PE) compliant with the WOC.
- The percentage of PE served by compliant WWTW.
- The percentage of qualifying WWTW meeting the numeric standards of the Urban Waste Water Treatment Regulations (UWWTR).

The 2009 PE figures for KPI's are obtained from Asset Management and agreed with NIEA in October/November 2008.

Changes implemented for AIR 10
Following comments from the Reporter and the reporting requirements of the Utility Regulator for PC10 reporting the following changes have been implemented in AIR10 and for developing future KPI targets.

1. The most significant change in compiling AIR10 data is that the base for the WWTW in service and the PE for each is the position as determined by Asset Management at 31st March 2010. This will ensure consistency with other AIR10 Tables. The impact of this is:

    - Any WWTW which were decommissioned between 1st Jan 2009 and 31st March are not included in the assessment, hence the AIR 10 compliance figures are not compatible with those of the KPI outturn.
    - The WWTW which have been removed are:
        Bullays Hill
        Castlewellan
        Randalstown
        Seagoe
        Lisbarnet
        Bush
        Bellanaleck

Magheralin
Poundburn

- The updated PE's also mean that the AIR10 return is not comparable to that of the 2009 KPI outturn as the latter were set on the basis of the PE figures of October / November 08.
- All wastewater compliance figures for KPI are impacted by the changes.

2. Only WWTW serving greater than 250 PE with numeric standards are included.
3. Following on from (2) it should be noted that the Asset Management figures for AIR 10 contain a number of WWTW which have just crossed the 250 PE but for which NIEA has not yet issued standards.
4. Upper Tier Limits are not included in WWTW compliance assessment when the PE served by compliant WWTW is to be determined e.g. in 2009 Newry failed the UTL but met the LUT, hence it counted as a fail for WWTW compliance but a pass for PE compliance.
5. Only the resident PE is included for compliance assessment i.e. tourists/visitors are not included in the total PE.
6. Following on from (5) this approach poses problems for UWWTR definitions. The total PE, both resident and visitor numbers is an integral part of defining which works is subject to the UWWTR numeric standards e.g. Benone WWTW would not be a numeric UWWTR works if the holiday/visitor numbers were not included. For this reason the PE is included in UWWTR compliance.

For all the reasons given above it must be emphasised that the AIR10 outturn is not comparable to that of the 2009 KPI outturn.

Parameters of KPI targets

The first target relates to the percentage of WWTW serving greater than 250 PE whose effluent quality complies with the WOC numeric standards. This includes the Private Public Partnership WWTW. Compliance for numeric standards is assessed on spot samples scheduled for collection to a programme agreed with NIEA.

The second target relates to the performance of the same WWTW but measurement is against the PE served by WWTW compliant with the numeric WOC.

The third target relates to the WWTW which are subject to the UWWTR numeric standards. These are WWTW serving greater than 10000 PE discharging to coastal waters and WWTW serving greater than 2000 PE discharging to rivers or estuaries.

Compliance against all three targets is assessed on a running total commencing the end of March on a monthly basis to produce reports for OMT and ET. As compliance starts at 100% and fall through out the calendar year,

there are insufficient samples in the first months to make a meaningful assessment of compliance, hence the March start.

How the compliance is measured

Line 20 - The percentage of WWTW serving more than 250 Population Equivalent non-compliant with the NIEA numeric WOC

The WOC specifies the number of samples to be taken per year and the parameters which have to be determined. WWTW may fail if the required number of samples are not taken or the full range of parameters not determined.

Compliance for each WWTW is assessed on a parameter basis over a calendar year using the look-up tables of the Urban Waste Water Treatment Regulations (NI) 1995. This statistically derived methodology permits a certain number of exceedances, based on the number of samples taken, for each parameter included in the WOC e.g. where 24 samples are taken, 3 exceedances of each parameter are permitted. When this number of exceedances is surpassed a WWTW is deemed to fail. The relevant section of the Look-up Table is given in Appendix 1.

A number of WWTW have an additional clause in the consent known as an Upper Tier Limit on certain parameters. One exceedance of this standard will lead to the WWTW failing for the year.

The WOC standards are contained in the Laboratory Information Management System (LIMS) and audit sample results are automatically assessed against the standard. LIMS generates a standard report listing all WWTW with numeric standards and indicating the number of exceedances and whether the works has passed or failed. The LIMS report is accessed through:

<Reporting><Sewage Reports><EHS Monthly Reports – All sites>

A small number of WWTW have nutrient standards, nitrogen and/or phosphorous, although these are an annual average. While LIMS calculates a running average, which is displayed in the report referred to above, it does not have the facility to compare this against a standard. This requires that the average is compared manually on an ongoing basis with the WOC standard. All standards can be viewed on the company server.

Exceedances can be discounted from compliance assessment should NIW be able to demonstrate to NIEA that, at the time of the exceedance, a works was not under normal operating conditions. The definitions of abnormal operating conditions are given in Appendix 2 but NIEA may permit discounts under other conditions e.g. skewing of performance through too many samples being lifted in a short period caused by rescheduling of samples. Should a sample be discounted it must be replaced by another sample taken on the same day of the week. A replacement sample when entered in LIMS will register automatically on the compliance report.

NIEA can also issue interim time banded standards during capital upgrades of a WWTW. This is a more relaxed standard applicable for a specified period over which construction work may disrupt the normal treatment processes. When this time banded standard is entered in LIMS it is taken into account in the production of the compliance report.

At monthly intervals (for the KPI, EC and OMT) and at the end of the calendar year, the number of WWTW which have passed the numeric WOC is calculated as percentage of the total number of works to determine compliance with the target.
Non-compliance for line 8 is the reciprocal of this.

Line 21 - The percentage of PE served by non-compliant WWTW
The PE served by non-compliant WWTW is calculated as a percentage of the PE served by the total number of WWTW with numeric WOC. As referred to above it should be noted that the UTL is not applied in determining this compliance.

Line 22 - The percentage of qualifying WWTW meeting the numeric standards of the Urban Waste Water Treatment Regulations (UWWTR)
The UWWTR standard is the same for all qualifying WWTW unlike the WOCs which are set on an individual basis dependant on the receiving water course.

Compliance is based on 24 hour composite samples taken by automatic samplers. The UWWTR standards are contained in the WOC and the same principles of compliance assessment apply i.e. look-up tables, upper tier limits, interim standards and discounting of samples. The UWWTR standards are given in Appendix 3. However there is one significant difference. In assessing compliance with the UWWTR standards there is the option of assessing parameter compliance on a percentage removal basis inlet to effluent.

If both inlet and effluent are taken, then it is permissible to assess compliance on a percentage removal basis, 70% BOD, 75%COD, from inlet to effluent or on the effluent results. Hence if a sample meets one of these criteria then it is deemed to pass. If the percentage removal criteria is achieved this will override an Upper Tier exceedance.

Where relevant compliance with nutrient standards is assessed against the UWWTR annual average standard.

At monthly intervals (for the KPI, ET and OMT) and at the end of the calendar year, the number of WWTW which have passed the UWWTR standards is calculated as percentage of the total number of works to determine compliance with the target.

Non-compliance for line 9 is the reciprocal of this.

Line 23 - The percentage of PE served by non-compliant UWWTR numeric standard WWTW

The PE served by non-compliant WWTW is calculated as a percentage of the PE served by the total number of WWTW. As referred to above it should be noted that the UTL is not applied in determining this compliance.

Roles and Responsibilities in Production of Compliance Statistics

LIMS Manager/Deputy

In conjunction with the Waste Water Manager:

- Obtain PE figures from Asset Management Section in October each year and agree with NIEA by November.
- Agree the WWTW to be considered for compliance assessment and sampling schedule with NIEA in November for the following year.
- Liaise with Asset Management on PE's to be used in AIR.

Sole responsibility;

- Liaise with the Laboratory Sampling Manager/Deputy in scheduling samples.
- Review standards within LIMS as instructed by the Wastewater Regulation Manager.
- Amend standards within LIMS in response to Interim Time Banded standards as instructed by the Wastewater Regulation Manager.
- Liaison with Sampling Manager /NIEA on rescheduling in all instances where either spot or composite samples are not taken as scheduled.
- Activate automatic samplers for collection of UWWTR composite samples.
- Liaison with sampling manager and Waste Water Services scientific staff where samplers fail to operate.

Waste Water Manager/Deputy

- Joint assessment with the LIMS Manager of PE's, WWTW for compliance assessment and sample scheduling.
- Submit applications for Interim Time Banded Standards in a timely manner to ensure the standards are in place prior to commencement of a Capital works project.
- Submit applications for sample discount within the 15 day time scale set by NIEA.
- Liaise with Waste Water Service staff on ITBS and discounting of sampling.
- Liaise with the LIMS Manager/Deputy on updating standards/discounts as received from NIEA.
- On a monthly basis from March onwards produce compliance data on the basis of the methodology outlined above to meet the time frame of the KPI, ET and OMT reports.
- Liaise with Waste Water Service staff on a monthly basis to agree compliance figures.

- Produce the end of year compliance figures by the end of February the following year.
- In conjunction with NIEA cross check on WWTW standards prior to the start of each calendar year.
- Review procedures prior to commencement of each calendar year.

Head of Environmental Regulation.

- Audit the compliance figures as produced by the Waste Water Manager prior to submission. This is done in conjunction with the Head of Waste Water Services.
- Liaise with the Head of Waste Water Services on general compliance issues.
- Liaise with the Head of Waste Water Services on setting KPI targets.

Appendix 1

No of Samples	Permitted Exceedances
4-7	1
8-16	2
17-28	3
29-40	4
41-53	5

Appendix 2

NORMAL OPERATING CONDITIONS UNUSUAL SITUATIONS AND NORMAL LOCAL CLIMATIC CONDITIONS

1. THE REGULATIONS' TERMINOLOGY

1.1 The term "normal operating conditions" is used in paragraph 4(b) of Part II of Schedule 3; the phrase "unusual situations such as those due to heavy rain" is used in paragraph 5 of Part II of Schedule 3; "normal local climatic conditions" are referred to in regulation 4(4)(a).

2. INTERPRETATION

2.1 In order to assist in interpreting the weather conditions that might be considered to be abnormal or unusual, a definition of exceptional weather conditions is given below, together with an example of what might be considered to be other kinds of abnormal or unusual operating conditions.

2.2 The abnormal conditions set out below include capital works construction and periods of industrial action. Both are being considered by the Regulatory Committee, along with other possible exceptions suggested by other Member States. An amendment to this guidance note will be issued in the light of any guidance from the Regulatory Committee.

2.3 Definitions

2.3.1 For the purpose of this *registered standard / consent* the works shall be deemed to have been under 'normal operating conditions' except during a period when the following apply:

a. 'Unusual weather conditions' which shall include the following:
   i) low ambient temperature as evidenced by effluent temperature of 5^{o}C or less, or by the freezing of mechanical equipment in the works;
   ii) significant snow deposits;
   iii) fluvial flooding;
   iv) weather conditions causing unforeseen loss of power to the works which could not be ameliorated by the reasonable provision and operation of standby generator facilities.

b. A reduction in the level of treatment due to periods of industrial action or acts of vandalism that could not have been reasonably prevented.

c. When the Regulator has issued a variation of the registered standard for reasons such as construction of capital works.

Appendix 3

Parameter	Concentration mg/l	Upper Tier mg/l	Comments
BOD	25	50	
SS	35	87.5	
COD	125	250	
Total Phosphorus*	1 2		PE>100000 PE 10000-100000
Total Nitrogen *	10 15		PE>100000 PE 10000-100000

STR Table 3

NORTHERN IRELAND WATER- ANNUAL INFORMATION RETURN 2010

SERVICE TARGET REPORT - Table 3: Customer Service

	DESCRIPTION	UNITS	DP	LAST KNOWN PERFORMANCE			2009-10 TARGET	2009-10 OUT TURN		2010-11 TARGET
				Reporting Year	Outturn	CG			CG	
A	**Making and keeping appointments**									
1	Percentage of customers with whom NIW missed appointments (meter related) or failed to give at least 24 hours notice of cancellation.	%	2	N/C	N/C		None Set	n/a		None Set
2	Percentage of customers for whom NIW failed to specify an AM or PM appointment OR on request, a 2-hour period during which they would visit them (meter related).	%	2	N/C	N/C		None Set	n/a		None Set
3	Percentage of customers with whom NIW missed appointments (other) or failed to give at least 24 hours notice of cancellation.	%	2	N/C	N/C		None Set	n/a		None Set
4	Percentage of customers for whom NIW failed to specify an AM or PM appointment OR on request, a 2-hour period during which they would visit them (other).	%	2	N/C	N/C		None Set	n/a		None Set
B	**Responding to account queries**									
5	Percentage of account accuracy queries substantively responded to within 10 working days.	%	2	N/C	N/C		None Set	n/a		None Set
6	Percentage of "change of payment method" requests the company was unable to action, AND did not reply to the customer within 5 working days.	%	2	N/C	N/C		None Set	0.00	B3	None Set
7	Percentage of billing contacts answered within 5 working days.	%	2	2008-09	98.64	B3	98.00	98.13	B3	99.90
C	**Responding to customer complaints**									
8	Percentage of written complaints NIW answered within 10 working days.	%	2	2008-09	97.60	B2	98.00	99.42	B4	98.50
9	Percentage of customer complaints resolved successfully upon first contact.	%	2	N/C	N/C		None Set	n/a		None Set
10	Percentage of customer complaints resolved successfully on first visit.	%	2	N/C	N/C		None Set	n/a		None Set
11	Failure demand: Percentage of incoming contacts initiated by company failure.	%	2	N/C	N/C		None Set	n/a		None Set
D	**Bills for metered customers**									
12	Percentage of domestic metered customers who received at least one bill during the year based on a meter reading undertaken by NIW, or a reading provided by the customer (either in response to an estimated bill or as a result of a request for a meter reading).	%	2							
13	Percentage of non-domestic metered customers who received at least one bill during the year based on a meter reading undertaken by NIW, or a reading provided by the customer (either in response to an estimated bill or as a result of a request for a meter reading).	%	2	2008-09	93.25	B2	None Set	92.26	B2	95.00
E	**Ease of telephone Contact**									
14	Percentage of calls abandoned.	%	2	2008-09	1.12	A2	1.00	2.58	A2	1.00
15	Percentage of calls - All lines busy.	%	2	2008-09	0.00	A2	1.00	0.00	A2	0.10
16	Call handling satisfaction score. (Min 0, Max5)	Nr	2	2008-09	4.40	A2	4.60	4.60	A2	4.65
17	Percentage of customer calls answered within 30 seconds. (During relevant business hours on Waterline, Billing Enquiries & Leakline)	%	2	2008-09	97.09	A2	97.00	92.62	A2	None Set
F	**Assessed Customer Service Information**									
18	How many hours per 7 day week is the NI Water Call Centre open?	Nr	2					168.00	A1	168.00

Service Target Report - Table 3: Customer Service

Table 3 covers targets and performance for Customer Service provision;

- Block A (lines 1-4) covers appointments,
- Block B (lines 5-7) covers response to account queries,
- Block C (lines 8-11) covers response to customer complaints,
- Blocks D and E (lines 12-13 and 14-17) cover performance with regards billing of metered customers and telephone contact respectively.

Northern Ireland Water is currently able to submit completed returns for Blocks D and E, with partial returns for Blocks B and C (lines 6, 7 and 8).

Northern Ireland Water is currently unable to submit complete returns for Block A and the remaining lines of B and C, as the targets are either not set/not measured or the systems/processes have not been adequately developed to enable robust reporting.

Lines 1 – 4 - Making and Keeping Appointments
Despite improvements in the contractual position, the Company has not been able to implement a complete monitoring system for making and keeping appointments.

For example, although meter readers may attend a visit as requested by a customer, there is not a formalised process in relation to the booking of appointments / cancellations which could be reported against.

An AM or PM slot is not currently offered, the customer is advised that the window is between the working hours of 8am and 4pm.

Lines 5 – 7 - Responding to Account Queries
NIW had 99,126 DG6 billing contacts throughout the reporting year, 97,271 of which were dealt with within five working days giving a performance of 98.1% against a target of 98%. The DG6 target for the current reporting has increased to 99.9%.

Lines 8 – 11 - Response to Customer Complaints
Of the 3469 written complaints received throughout the reporting year, 3449 were closed within ten working days (regardless of when they were received) giving a DG7 performance of 99.42% against a target of 98%. The DG7 performance target has increased to 98.5% for the current reporting year.

Lines 12 & 13 - Bills for Metered Customers
At present no decision has been made on the billing of domestic customers in Northern Ireland.

The Company aims to read the meters of non-domestic customers twice a year and bill accordingly. Customers may also read their own meters and

report their consumption through the company's Billing Line. If for any reason a customer's meter can not be read, an estimated bill will be generated. NIW issued 62,825 metered customers a bill based on either a company or customer read during the reporting year out of 68,093 total metered accounts (not excluded from the indicator) giving a DG8 performance of 92.26% against a target of 95%. The reasons for failing to meet this target have been set out in the Table 5 Company Commentary. The target for the current reporting year will remain at 95%.

Lines 14 – 17 - Ease of Telephone Contact

During the reporting year 351,864 calls were received on advertised contact lines. Of these 9.069 were abandoned by the customer – 2.58% of calls abandoned falls short of the 1% target set for the reporting year. This failure was mainly due to the severe winter weather in December 2009/January 2010. The target for *abandoned calls* will remain at 1% for the current year.

No customers who phoned during the reporting year received a busy tone. The target for '*all lines busy'* will remain at 0.1% for the current year.

NIW's customer call handling satisfaction score (out of 5), as assessed by the McCallum Layton survey, was as follows:

Quarter 1	4.46
Quarter 2	4.57
Quarter 3	4.60
Quarter 4	4.80
Average	**4.60**

This gives an average call handling satisfaction for the reporting year of 4.6, meeting the set target. A target of 4.65 has been set for the current year. Out of the 351,864 calls received on advertised contact lines, 323,492 were answered within 30 seconds giving a performance of 92.62% and therefore missing the set target of 95%. A target of 97% has been set for the current year.

Ongoing Developments

NIW continues to develop its policies and strategies for improving customer service through its Customer Service Delivery projects within the Business Improvement Programme.

These projects will build upon the work of the Customer Hub. The programme of work is customer process driven and will attract considerable cross directorate support and engagement if it is to meet its objectives. It will support the medium and long term objectives within PC10, which build upon the short or immediate term issues currently being tackled. In particular Customer Services will address the volume of calls it currently receives. A number of strategic projects will be initiated in the PC10 period to specifically address call volumes and overall levels of customer service. These include:

- DG6 – project specifically aimed at improving overall bill accuracy to reduce call volumes and the effectiveness on handling bill queries end-to-end.

- Call Centre – Work Control Centre links – development of call handling scripts to better diagnose calls coupled with a substantial improvement on the volumes and quality of communications between the call centre and the work control centre will substantially reduce the volume of repeat calls.

- CRM Self Service – development of self-service channels (web and IVT) to reduce the number of calls that need to be answered by call agents, e.g. on-line applications for new connections or septic tank empty requests.

NIW recognises that to continuously improve is a fundamental requirement of customer service and to meet ever more challenging targets it must invest not only in changing the way it handles customer issues (the processes) but the way the business thinks about customer issues (the culture). It is essential that every person along the customer issue resolution path recognises that they are resolving a customer issue and that the resolution recommended by NIW should try and resolve the customer issue once and for all.

The ongoing projects within the Business Improvement Programme will deliver benefits in terms of efficient processes and service delivery, and having efficiently installed, effective and managed processes NIW will be able to produce accurate and timely information to assist completion of key customer performance reporting and use this information to model their medium and longer term customer objectives more accurately.

NIW is required to demonstrate greater efficiencies in order to reduce costs and deliver improvements of service to the customer experience by reducing the frequency, severity and cost of service failure. These improvements will reduce the risk of damage to reputation and incurring legislative costs due to service failure, and mitigate the risk of failing to meet regulatory requirements.

NIW's 2010 vision states that 'customer service will in future be directly linked via contact handling, through our future processes to operations, and the payment for services'. It is therefore essential that NIW continue to improve processes in a demonstrable way in order to deliver against this vision.

STR Table 4

NORTHERN IRELAND WATER- ANNUAL INFORMATION RETURN 2010

SERVICE TARGET REPORT - Table 4: Environmental Impact / Sustainability

	DESCRIPTION	UNITS	DP	LAST KNOWN PERFORMANCE			2009-10 TARGET	2009-10 OUT TURN		2010-11 TARGET
				Reporting Year	Outturn	CG			CG	
A	**Sustainability indicators**									
1	Percentage of NIW's power usage derived from renewable sources.	%	2	2008-09	11.30	A2	10.00	12.72	A2	11.00
2	Percentage of water mains and sewers installed using trenchless technologies.	%	2	2008-09	97.00	A2	92.00	98.18	A2	92.00
3	Percentage of NIW's excavated material that was re-used in reporting year.	%	2	2008-09	91.00	B2	75.00	83.00	B2	75.00
4	Carbon emissions profile: Total tonnes of CO2 equivalent (tCO2e) produced in reporting period.	Nr	2	2008-09	176033.00	B3	None set	186629.00	B3	None set
5	Tonnes of CO2 equivalent (tCO2e) offset in reporting period.	Nr	2	N/C	N/C		None set	Nil return		None set
B	**Pollution incidents**									
6	Total number of pollution incidents attributed to NIW per million resident population equivalent (pe) served.	Nr	2	2008-09	131.19	C5	None set	143.59	C5	None set
7	Number of H, M and L (High, Medium and Low) category pollution incidents occurring at NIW combined sewer outflows and foul sewers per million resident population equivalent (pe) served.	Nr	2	2008-09	95.28	C5	None set	110.52	C5	None set
8	Number of High and Medium category pollution incidents resulting from NIW's sewage collection and treatment activities per million resident population equivalent (pe) served.	Nr	2	2008-09	25.85	C5	None set	24.01	C5	None set
9	Number of Low category pollution incidents resulting from NIW's sewage collection and treatment activities per million resident population equivalent (pe) served.	Nr	2	2008-09	103.42	C5	None set	115.05	C5	None set
10	Number of High and Medium category pollution incidents resulting from NIW's water treatment and distribution activities per million resident population served.	Nr	2	2008-09	0.96	C5	None set	1.11	C2	None set
11	Number of Low category pollution incidents resulting from NIW's water treatment and distribution activities per million resident population served.	Nr	2	2008-09	0.96	C5	None set	4.43	C2	None set

Service Target Report - Table 4: Environmental Impact/Sustainability

Line 1 – Percentage of NIW's power usage derived from renewable sources

The totals in this section include self generated renewable electricity and electricity purchased through contracts with licensed electricity suppliers. NI Water's exceeded their target of 10% of renewable energy use by March 2010. NI Water total renewable energy use was calculated at 12.72% for this reporting period. NI Water has aligned with Government Targets of 10% by 2010 and up to 15% by 2015 so long as it does not entail excessive cost.

Line 4 – Carbon emissions profile

The carbon emissions quantities supplied for period 2009/10 are compiled using company data input to the UKWIR CAW for estimating Operational HG emissions. The total estimated emissions relate to electricity, other fuels, sludge, company owned vehicle transport, private mileage and airline travel. Carbon emissions associated with transport by taxi, train, bus, shipping, freight, or chemicals and supply chain are not included in this figure.

Current Position – Carbon emissions

- This AIR10 return has been made using the UKWIR CAW Ver. 4.0 for estimating operational GHG emissions and following iteration with NIAUR as to their requirements.
- Calculations to convert to C02 emissions have been made using the UKWIR CAW Ver. 4.0 for estimating operational GHG emissions as industry standard conversion factors have been applied within the workbook. The rates for conversion within the workbook are protected therefore there is no risk of making inadvertent conversion errors.
- This NIW AIR10 return does not include any data for 3 of the basket of 6 GHG's i.e. HFCs, PFCs and SF6.
- Travel in company vehicles is accounted for using diesel consumption figures from fuel dispense measurement systems.
- A nil return has been made for emissions from journeys made by taxi, train and bus transport.
- A nil return has been made for rail, shipping and freight transport.
- Data has been submitted for emissions associated with staff air travel.
- Carbon emissions associated with chemicals and supply chain are not included in the return.

The majority of our GHG emissions are associated with electricity and we have very accurate figures for usage however some shortcomings in data quality for other areas have led to an overall lower confidence grade.

Line 5 – Tonnes of CO2 equivalent offset in reporting year

No mechanisms were in place to measure carbon offset within NI Water in the reporting period. An ongoing review of carbon emissions is underway to determine measures for accounting, mitigation and adaptation in line with other Water UK companies approach. Targets set for carbon offsetting, mitigation and adaptation will most likely align with current aspirational

Government targets but will be dependent upon relevant funding to enable compliance with any targets set in the future.

Lines 6 - 11 – Pollution incidents
The Northern Ireland Environment Agency (NIEA) monitors pollution incidents, assesses their severity and attributes them to NI Water, Industry, agriculture etc.

The incidents are classified as high, medium or low severity. This classification is assumed to equate to the category 1, 2 and 3 pollution incidents, the latter being the classification used by the EA in England and Wales.

For NI Water incidents, NIEA attributes them to specific assets e.g. CSOs, SPSs and this can be verified by NI Water.

The audit reports produced by NIEA are supplied to NI Water on a regular basis. It was agreed that this should be on a monthly basis with each month's data provided by the end of the following month. This information is supplied to Operations Services from NIEA. The time frames have not always been achieved by NIEA.

To date, NI Water has installed telemetry into 397 Wastewater Pumping Stations therefore increasing the visibility of potential overflows from these assets. Work will continue throughout 2010/11 with further installations planned. In addition, CSO monitors have been installed at 225 sites in 09/10. Of these sites, 41 require some additional modification to ensure a reliable communication. This upgrade is dependent on funding.

Phase 2 of the CSO monitors project plans to install 352 monitors, approximately 200 in 2010/11 financial year and the remainder in 11/12. This is however dependant on the business case being approved and procurement through an existing tender. If the contract has to be re-tendered this will lead to delays and hence much fewer CSO's (if any) will be installed this financial year.

NI Water let, in August 2008, a bundled contract to a single Sewer Maintenance Contractor, which has improved the speed of response to potential incidents across the province. As part of this contract the contractor had to devise pre-planed maintenance runs for sewers and SPSs with the ultimate aim of reducing sewer blockages over the term of this 5 year contract.

NI Water also held training and awareness sessions for operational staff involved in dealing with pollution incidents during the reporting period.

The 2009 data supplied by NIEA has been analysed by Operations Services as follows:

Definition	No of Incidents
Total number of incidents	317
Number of H, M, and L incidents at CSOs and foul sewers (SPS on the sewerage systems have been included).	244
Number of H&M incidents resulting from sewage collection and treatment activities.	53
Number of L incidents resulting from sewage collection and treatment activities.	254
Number of H&M incidents resulting from water treatment and distribution.	2
Number of L incidents resulting from water treatment and distribution.	8

The figure for 'million population equivalent served' has been taken from AIR10 Table 15 line 6 which is defined as 'Equivalent population served – resident'. The figure given is 2.20766 million with a confidence grade for the line of C5 so the same grading has been applied to lines 6 to 9.

The figure for the million population served by potable water supply is provided from AIR10 Table 2 Key Outputs Water Service Line 20. This figure is 1.805800 million and is given a confidence grade of C2. The same grading has been applied to lines 10 and 11.

Annual Information Return 2010

Section 4

Level of Service Methodologies

Northern Ireland Water

Level of Service Methodology

DG2 Low Pressure

Level of Service DG2 - Risk of Low Pressure

Introduction

NIW's first DG2 Register produced for AIR08 identified that there were 10,321 properties receiving a service below the reference level. This first assessment was based primarily on modelled data from Zonal Study investigations. For AIR08 an 'Under Investigation' database was populated containing 105,024 properties and these were subsequently investigated for AIR09. In addition the company undertook an extensive programme of field logging to verify the robustness of this data. The first phase of verification along with the inclusion of historical Watermain Rehabilitation schemes reduced the number of DG2 properties to 5770 at the end of March 2009.

During 2009/10 the field logging programme has been progressed to the extent that all properties on the original DG2 register have now been substantively validated resulting in a number of properties being removed from, and others being added to, the register based on "better information." Further removals have also been made as a result of "company action" in the form of Watermain Rehabilitation schemes concluded this year. Finally a number of removals have also been attributed to networks improvements.

Line 3 – Properties below reference level at end of year

Definition: Properties receiving pressure below the reference level at the end of the year.

Method 1: DG2 Properties - Procedure for the investigation and recommendation for removal and addition of properties on the DG2 register.

The procedure for the investigation and recommendation for removal and addition of properties to the DG2 Register is based on the 'DG2 NIW Procedures April 2008' document produced by the NIW Leakage Data Management Unit. The objectives of the investigation are as follows:

1. The verification of data attributing to the DG2 entries.
2. Removal of DG2 entries on the register as a result of more robust data being available.
3. The addition of properties to the register as a result of more robust data being made available.
4. The identification and investigation of properties receiving less than 7.5 m at the point of connection.
5. Removal of DG2 entries resulting from capital works and networks improvements.

The investigation for each DMA containing DG properties was divided into three actions for items 1 - 4 above.

- A desktop study.
- DMA pressure logging/site investigation.
- A final report on each investigation.

As a result of Post Project Rehabilitation Appraisals provided by Asset Management DG2 removals are processed due to company action under item 5.

1. The Desktop Study

The desktop study consists of a review of all relevant data attributing to the DG2 entries. The objective is to determine the pressure at the connection point serving the property taking in to consideration the ground elevation at the connection point and the available total head (TH) i.e. TWL of service reservoir. To enable this figure to be calculated it is necessary to determine the nature of supply to the property, for example:

- Gravity.
- Pumped.
- Pressure Managed, (PSV or PRV).

The initial study looks at the TH at each property as recorded in the DG2 Register, compared to the calculated estimated TH at the same property. Figure 1 shows an example of the calculation from a gravity supply.

			Data from NIW DG2 Register			Desktop Calculations Using Static TH		
DMA Name	X Coords	Y Coords	Property Elevation (m)	Property Pressure (m)	Pressure Type	Connection Elevation DEM (m)	Reservoir TWL DEM (m)	Estimated TH at Property (m)
Burnside	284005	431868	40	11	Surrogate	40	55	15
Burnside	284007	431861	40	11	Surrogate	40	55	15

Figure 1:

2. The Site Investigation/Provision of Information

The example above indicates that the total head may provide a satisfactory pressure at the property under investigation but in accordance with the NIW approved methodology this does not carry enough substantive evidence to support removal from the DG2 Register thus promoting the need for site investigation.

The objective of the site investigation is to acquire the necessary data to allow a more detailed assessment to be carried out. The 2 key elements of this investigation are the logging of the water pressure and the gathering of accurate height data for both the logging point and DG2 property connection point. In keeping with the NIW guidelines the following procedures are followed:

- Logging points are identified within the network, which do not exceed 250m in distance from the DG2 stopcock.
- The logging points are within the same DMA/PMA as the DG2 property.
- A unique logger ID is clearly assigned to the logging point.

- An accurate elevation of each logging point is provided using Real Time Kinematics (RTK) GPS. A value of 450mm is subtracted from this elevation to allow for the depth of the FH spindle.
- Logging point boundary polygons around the hydrants are digitised onto MapInfo to allow the associated properties to be assigned to the relevant logger.
- A pressure log and elevation are taken in any adjoining DMAs. This is to identify any potential for a BV change to improve the pressure at the DG2 property.
- A new ferrule elevation is produced for each property using Digital Elevation Model (DEM) 2008 data. The ferrule point value associated to each property is used to determine the height used for that property within the Total Head calculation.

To assist with the site investigation, a detailed map is produced showing the following information:

- DG2 properties labelled with DG2 register water pressure.
- Pointer Property data showing elevation at each property (Pointer Plus Version October 2008).
- Water pipes, fittings i.e. SVs, Fire Hydrants (FHs) terminating nodes etc.
- DMAs and PMAs (where applicable).
- Background Vector maps.
- Required pressure logging points.

2.1 Additional Information

The procedure for the investigation into properties potentially receiving < 7.5m head is to undertake a survey of each site on the Register. The key information from the survey is as follows:

- Determine if property is not derelict or is not connected to the watermain.
- Determine if property has relevant x, y co-ordinates.
- Determine if property is connected to NIW supply.
- Determine if possible, the actual point of connection.
- Establish if possible a spot pressure at the property.
- Determine if necessary an accurate elevation at the point of connection or the property itself.

3. Final Report.

Following field testing and site investigation routines all data is analysed and the findings are included within a Recommendation for Removal Report or alternatively a Recommendation for Inclusion Report.

1. The removal of entries due to robust data being available.
2. The removal of genuine entries resulting from infrastructure changes.
3. The provision of detailed information to support the inclusion of properties in the DG2 Register.

If the data collected verifies that properties that are in receipt of a pressure >15m, then the DG2 properties are recommended to NIW for removal. Properties removed are supported by a brief technical assessment based on pressure loggings, RTK GPS height data and other relevant factors including the required pressure logging trace/print out.

Where properties are discovered to have been positioned incorrectly within NIW GIS resulting in their inclusion in the original register, and repositioning indicated that these properties were in receipt of pressure > 15m, these DG2 properties are recommended for removal.

Those properties identified as being in receipt of a pressure <15m remain on the Register and a brief technical assessment based on pressure loggings, RTK GPS height data and other relevant factors, including the required pressure logging trace/print out, is provided. Prior to this information being provided a brief assessment is undertaken to determine if the properties could be transferred onto an adjoining DMA/PMA. This information is included within the assessment where deemed viable.

Additional properties within logging areas determined to be in receipt of pressure <15m are recommended for inclusion on the register. As above a brief technical assessment based on pressure loggings, RTK GPS height data and other relevant factors, including the required pressure logging trace/ print out, is provided. Prior to this information being provided a brief assessment is undertaken to determine if the properties could be transferred onto an adjoining DMA/ PMA. This information is included within the assessment where deemed viable.

Removal of Properties due to Company Action / Networks Improvements
On completion of company action, Rehabilitation schemes PPRA reports associated with the various work packages are submitted to Asset Management Directorate for sign off and Leakage Function for processing in relation to the update of the DG Register.

Leakage Data Management Unit on receipt of the suite of information including logger positioning site maps, accompanying logged data, PPRA reports and DG2 Investigation Reports align this data to the existing register. Checks are conducted on logged information to ensure compliance in terms that each logger site is within 250m of actual properties highlighted and that minimum pressures provided correlate to expected total head values. Hyperlinks are created for each set of logged data, map and report to provide audit trail. Further audits are conducted and finally the DG2 register is updated off indicating affected sites remaining on the register, additions if appropriate and all known exclusions.

The option of introducing removals due to networks improvements is investigated via rationalising adjacent DMA boundaries following adjacent DMA pressure loggings as per step 2 in the method statement above. Resulting networks amendments follow the removal process and the submission of final reports leads to an update of the DG2 register.

Deviation from the conditions laid out by NIW for DG2 Register.
Due to the rural nature of some DMAs it is not possible in some exceptional cases, i.e. groups of DG2 entries within individual DMAs, to undertake logging within 250m of the DG2 property as set out in the NIW methodology. In these instances a number of Fire Hydrants are logged to enable an accurate pressure profile of the DMA to be established.

The following alternative procedure is used:

- A desktop study of the DMA containing DG2 entries is undertaken.
- A series of FHs are identified for pressure logging. The locations are selected to ensure that an accurate pressure profile of the DMA is established.
- Data loggers are fitted to log the pressures over a seven day period.
- All logging points are surveyed using RTK GPS; this provides accurate height data for Total Head calculations. A value of 450mm is subtracted from the elevation to allow for the depth of the hydrant spindle.

On compilation of this data a revised analysis is undertaken to determine the nature of supply and create a pressure profile within the DMA/PMA to determine potential DG2 entries. If the pressure profile shows that the Total Head within the DMA/PMA is sufficient to provide adequate pressure, the results from the field testing and analysis are presented as evidence for removal of the DG2 entries and a Recommendation for Removal Report is issued.

Where analysis identified properties are in receipt of a surrogate pressure <15m they will remain or be added to the Register in accordance with NIW procedure.

Calculation: Properties taken from DG2 Register but does not include allowable exclusions.

Line 4 – Properties receiving low pressure but excluded from DG2
Definition: Properties known to receive low pressure but excluded from the DG2 register.
Method 2: – Properties entered on the DG2 Register using the methodology stated under line 3 but excluded from line 3 where the supporting documentation has confirmed the property elevation is within 15m of the service reservoir serving the property.
Calculation: – Properties taken from DG2 Register deemed to be allowable exclusions.

Line 4a – Properties receiving pressure below a surrogate level of 7.5m at end of year
Method 3: – Properties entered on the DG2 Register using the methodology stated under line 3 but excluded from line 3 where the supporting documentation has confirmed the property elevation is within 15m of the service reservoir serving the property.
Calculation: – Properties taken from DG2 Register receiving pressure <7.5m.

Sources of Information
For AIR10 data was obtained from completed rehabilitation schemes and networks improvements (capital works), NI Water Asset Information Centre and field studies accompanied by final reports submitted by Crowder Consulting.

Scope and Coverage
One of the primary objectives throughout AIR10 was to conclude the validation exercise on existing properties within the DG2 register which commenced in AIR09. Similarly the ongoing removal of properties due to company action via the processing of PPRA reports and networks improvements was targeted. Finally a commitment was given to conduct an extensive investigation into all properties that previously indicated a recorded pressure below 7.5m.

Assumptions and Exclusions
The only exclusions listed are those within 15m elevation of the service reservoir. NI Water does not currently have in place a permanent pressure monitoring network and is not in a position to identify exclusions arising from intermittent network incidents or infrastructure changes. Assumptions for AIR09 are identified in ‘Method (1)’ and ‘Method (2)’. A surrogate pressure of 15m has been used to identify DG2 properties.

Northern Ireland Water

Level of Service Methodology

DG3 Supply Interruption

This document has been laid out as follows:

1.0 OBJECTIVE & AIM

To identify the number of properties affected by planned and unplanned supply interruptions lasting longer than 3 hours, 6 hours, 12 hours and 24 hours.

The aim of the register is to allow verification and audit of the reported information for DG3 and to enable the identification of the properties affected. It should contain information on the timing, duration and cause of each interruption and sufficient information to enable all properties affected by interruptions lasting more than three hours to be identified. Therefore, the register should include:

- properties affected (by name and location or number and street);
- date and time of interruption;
- duration of interruption and time supply restored;
- cause of interruption;
- notice given; and
- the name of person responsible for entering records in the system.

The DG3 Register is compiled and held by Operations Services Section in Northland House.

2.0 REPORTING REQUIREMENTS

The information to be reported within Table 2 of the Annual Information Return (AIR) is as follows:

2.1

Line	Description
5	More than 3 hours unplanned
6	More than 6 hours unplanned
7	More than 12 hours unplanned
8	More than 24 hours unplanned
9	More than 3 hours planned and warned
10	More than 6 hours planned and warned
11	More than 12 hours planned and warned
12	More than 24 hours planned and warned
13	More than 3 hours caused by third parties
14	More than 6 hours caused by third parties
15	More than 12 hours caused by third parties
16	More than 24 hours caused by third parties
17	More than 6 hours unplanned (overruns of planned interruptions)
18	More than 12 hours unplanned (overruns of planned interruptions)
19	More than 24 hours unplanned (overruns of planned interruptions)

Note: Interruptions should be reported under each relevant time band so that the category for interruptions exceeding:

- 3 hours also includes all interruptions lasting more than 6 hours;
- 6 hours also includes all interruptions lasting more than 12 hours; and
- 12 hours also includes all interruptions lasting more than 24 hours.

Each interruption should be classed as a single interruption event, and should be recorded under only one of the four categories of: unplanned or unwarned; planned and warned; unplanned third party interruptions; or unplanned or unwarned due to overruns of planned and warned interruptions. If there are a significant number of overruns between 3 and 6 hours, the number should be reported in the commentary.

Further guidance, if required may be found in the Annual Information Return Reporting Requirements & Definitions Manual 2010, Issue 1.0 – March 2001.

3.0 DEFINITIONS

3.1 Interruption
An interruption to supply is defined as the actual loss of water supply to a property, whether planned or unplanned, warned or unwarned.

Supplies may be affected by other factors, for example, lower pressure through the flushing of mains, or restrictions on use; these are also covered under the DG2 and DG4 procedures.

3.2 Start time
For a planned interruption the start time is the time at which water is unavailable at the first cold tap in a property; for an unplanned interruption it is when customers first notice the loss of supply or if this information is not available the time a 'no water' complaint is logged by the Customer Relation Centre. End time is when the company is satisfied that water has been fully restored to an acceptable pressure to the affected properties. This is not necessarily the same as when the main supply valve is open.

3.3 Duration
The duration is the length of time for which customers are without a continuous supply of water. An interruption starts when water is unavailable from the first cold tap in a property and finishes when the supply to the last property affected by the interruption is restored to the tap.

3.4 Event
Event is the term used by Northern Ireland Water Limited to describe its involvement in an abnormal occurrence in its services to customers.

3.5 Planned & Warned Interruption
This is where notice of an interruption (> 3 Hours) is provided to properties affected at least 48 hours in advance of the beginning of the interruption.

3.6 Unplanned/Unwarned Interruption
This is when an unplanned or a planned and unwarned interruption to supply occurs. Properties receiving less than 48 hours notice of a planned

interruption (> 3 Hrs) are to be counted as 'unplanned' and reported under this category. Any planned interruption that is started before the planned date and time contained in the warning notice, whether this occurs within a 48hr warning period or not, is also to be re-classified as 'unplanned'.

3.7 Overruns

When a planned and warned interruption continues beyond the end of the warned time, for whatever reason and whether or not a customer has been advised during the shut down that an overrun is going to occur, the interruption is described as an overrun and is reported separately.

3.8 Third party interruption

A third party is defined as anyone who does not act for, or on behalf of NI Water. This category is intended to cover damage to NI Water's mains or other equipment which directly or indirectly results in an unplanned loss of supply to enable the damage to be repaired. Where a third party interruption is not caused by a third party, but repair may be delayed by a third party, for example when a gas main runs close to a water main and needs to be isolated, the whole of the duration on the interruption must be reported as an unplanned interruption. Companies can describe this event in their commentary.

3.9 Electrical Failures

Interruptions to supply caused by electricity supply failures must be reported as unplanned, unwarned interruptions, and identified in the records as caused by electrical failure to enable the details to be included in the NIAUR Return commentary.

3.10 Properties affected by more than one interruption during the report year

Properties, which are affected by more than one interruption during the report year, should be reported separately for each interruption. This means, for example, that a property affected by three supply interruptions would be reported three times, once for each interruption. Where properties are affected by repeat interruptions on the same day, these should only be counted separately where there is a minimum of one hour between the interruptions for the supply to be available (e.g. to refill storage tanks). When shorter gaps occur the duration is counted from the start of the first interruption until the last restoration of supply.

4.0 PROCEDURE

It should be established before any work is carried out on site which function is responsible for the collection of interruption information for the interruption record, as occasions arise where it is not clear which function should carry out the repair work.

In general whichever function operates the valves to cut off supply at the site of interruption is also responsible for the collection and ownership of the interruption information. This means, for example, that although leakage services is responsible for carrying out the repair to the interruption, Networks

water is responsible for the collection of the information if they have operated the valves.

4.1 Planned Interruptions (lasting > 3 Hours)

Planned interruptions to supply arise as a result of work being carried out by different functions within Operations Directorate or by functions within other NIW Directorates. These have been identified as follows:

- Planned interruptions carried out by Networks Water.
- Planned interruptions carried out by Leakage.
- Planned interruptions carried out by Engineering and Procurement (E&P). and
- Planned interruptions carried out by Customer Services Directorate (CSD).

Regardless of the source of the interruption to supply all planned interruptions must follow the procedures for giving the appropriate warnings. Each function is responsible for collection and recording all appropriate information to be included in the DG3 register.

All affected properties must be notified by letter, or card drop, at least 48 hours before the shutdown, notifying them of the planned times and dates of shutdown and the restoration of supply. A minimum of 48 hrs warning must be given for planned interruptions greater than 3 hrs. The start of the warning occurs when the last card has been delivered or the last letter sent to the properties affected. If for example, there is estimated to be 500 properties to be warned then the card drop operation starts at 9.00am and finishes at say 2.00pm, the warning period starts at 2.00pm, on say, 2nd July for 48hrs. Work should not start on site on the planned interruption until 2.00pm on the 4th July.

A copy of the letter of notification or the information contained on the card used in the card drop should be sent to the following for information – Customer Relations Centre Front Desk, Work Planning Unit, Telemetry Control Centre, Functional Manager and relevant Northern Ireland Fire and Rescue Service. For contact details see Appendix A.

The number of properties affected by a planned interruption should be determined by the most accurate means available at the time of:

a) planning activity;
b) the interruption; or
c) any subsequent more detailed investigation.

At the time of the initial assessment this is likely to be by property count or an estimate based on local knowledge. For recommendation for estimating numbers of properties see paragraph 5.3.

4.2 Planned interruptions carried out by Networks Water or Leakage

Field Staff on site is to record all information on a proforma sheet (see Appendix D). The proforma sheet contains the raw data associated with the interruption and is taken to an appropriate computer workstation for input into OMIS. These proforma sheets must be kept for audit purposes.

The Networks Water or Leakage Field Manager responsible for the planned works is required to ensure that all relevant information is input to the OMIS Interruption Reporting System and all documentation is retained for audit purposes.

Details of the OMIS input sheet and the OMIS user guide can currently be obtained from Operation Services in Northland House.

4.3 Planned interruptions carried out by E&P or CSD.

Information relating to interruptions carried out by E&P and CSD use a combination of an interruption Proforma and an excel spread sheet. An appropriate member of E&P or CSD staff should sign off the information to be recorded in the DG3 register each week/ month.

Details of the Interruptions Proforma (see appendix D) and spreadsheet can currently be obtained from Operation Services in Northland House.

4.4 Unplanned Interruptions

As defined above, unpredicted events such as mains bursts, or interruptions that are planned but where customers are not warned at least 48 hours in advance, are classified as unplanned interruptions.

Unplanned interruptions are mainly the responsibility of the Networks Water function and information should be recorded using the OMIS Interruptions Input screen.

Following receipt of a ‘No water/Burst main’ complaint the field manager will investigate as soon as possible and provide ‘status updates’ to the Work Control Centre on the progress of remedial works. The field staff on site record all information on a proforma sheet (see appendix D). The proforma sheet contains the raw data associated with the interruption and is taken to an appropriate computer workstation for input into OMIS. These proforma sheets must be kept for audit purposes.

Local Network Water Area Managers may be made aware of interruptions other than as a result of customer calls. In such cases, the Field Manager should ensure that relevant details are passed to the Work Planning Unit for processing.

Details input to the OMIS Reporting System are to include the interruption start time, as noted by the first affected customer, the time at which the supply was restored and whether a third party or an electrical supply failure was the cause.

4.5 Records of numbers of properties affected

The number of properties affected by an interruption should be determined by the most accurate means available at the time of:

a) the interruption; and
b) any subsequent more detailed investigation.

At the time of the initial assessment this is likely to be by property count or an estimate based on local knowledge.

5.0 RECORDS

Overall responsibility for DG3 records lies with the Head of Networks – Water, however the DG3 Register is compiled and held by Operations Services in Northland House.

Networks Water and Leakage record interruption information on the OMIS system. E&P and CSD record interruption information on excel spread sheet.

5.1 OMIS Interruption Recording System

OMIS allows five types of interruptions to be recorded:

- Unplanned;
- Planned;
- Unplanned Third Party;
- Overruns; and
- Planned – unwarned (Leakage only).

The OMIS information sheet (proforma) form Appendix D of this document.

When all information is input into OMIS and is saved, the information is then included in the interruptions register within OMIS. This interruption record can be revisited with more accurate information until the interruption is checked as complete. The information contained on the OMIS input screen is then permanently transferred to the interruption register and cannot be altered.

Most of the information required will be able to be input directly onto the input screen and will probably not be altered. Some information e.g. House numbers and addresses will be initially estimated by the operative or the supervisor. However more investigative work may be required to give an accurate number of houses. The interruption record can then be updated when this information becomes available. For procedures for obtaining house numbers and address see paragraph 5.3 below.

Local Network Water Area Managers and the Network Business Unit are to ensure that all relevant details are recorded and input to the system as soon as possible, and any paper records or notification cards retained for general audit purposes.

On-call staff are to gather all relevant information and report to the Local Network Water Area Manager as soon as possible the next working day.

Inputs to the OMIS Interruption System shall be closed out by the 10th of each following month. Checking of input data and local audit checks are to be carried out by the Networks Business Unit. Following these checks the networks Business Unit will release the data to Operations Services for inclusion into the DG3 register and calculations for KPIs.

5.2 Interruption Excel Spreadsheet

Planned interruptions undertaken by E&P and CSD will most likely be carried out by a number of contractors. The contractors representative should gather all appropriate information on an Interruptions Proforma sheet and then transfer this information to the Interruptions excel spreadsheet. The excel spreadsheets should be collated at the end of each week/month and signed off by an appropriate member of E&P or CSD staff and sent to Operations Services for inclusion into the DG3 register. All proformas should be stored by E&P and CSD for Audit purposes.

Details of the Interruptions Proforma (see appendix D) and spreadsheet can currently be obtained from Operation Services in Northland House.

5.3 House numbers and Addresses

It is a requirement of NIAUR that the numbers of houses and their addresses, that experience an interruption to supply that exceeds 3 hours, should be recorded. The number of properties affected by an interruption should be determined by the most accurate means available at the time. This is likely to be:

a. Property count

Operatives on site tending to a relatively simple interruption may have sufficient knowledge to estimate accurately the number of properties affected. This can be done by carrying out a property count. This then should be recorded on OMIS as say 1- 10 High Street or 15 – 25 Main Road (property count). The house count can be done during the course of the repair to the interruption being carried out.

5.4 Records of Interruptions

Information that is to be recorded for both planned and unplanned interruptions is contained in the OMIS user guide held in Operation Services.

In general all interruption to supply should be recorded. However there are large numbers of very short interruptions to supply carried out by Leakage function and CSD. These interruptions are routine, inconsequential and last no longer that 30mins. Information about these interruptions are held by managers in Leakage and CSD and are therefore not required for the interruption to supply register. Discretion should however be used in all cases. If difficulties arise, or there happens to be an exception to the type of routine interruption referred to above, that gives rise to an interruption that lasts for more than 1 hour then, this interruption should be recorded. Guidance on

which interruptions that should be recorded is to be given by Leakage and CSD managers.

In general: Routine interruptions lasting less than 1 hr need not be recorded as part of the interruptions register except at the discretion of the operative or networks manager.

All Interruption records held on OMIS are to be approved by appropriate line management within each function *and closed off by the 10th of the following month e.g. all records for say April should be approved and closed by the 10th May.* Operations Services will email the different functions reminding them of the deadline at the end of each month. Interruption records held by E&P and CSD should be sent to Operations Services by the same date.

5.5 Historical records

All associated documentation is to be kept for seven years.

5.6 Audit Trail

The maintenance of audit trails is very important. During AIR audits the Reporter would more than likely want to investigate several interruptions and the associated documentation. It is therefore imperative that all records including proformas corresponding to individual interruption records are stored locally for audit purposes.

5.7 Amendments to Information

All amendments to the base data contained in OMIS or information changed during the course of the development of the DG3 Register in excel must be supported by a detailed explanation.

6.0 REPORTING

6.1 NIWL Reports

The OMIS Interruption System can be updated on a continuous basis as and when interruptions occur. The Monthly Summary Reports can be generated following the quality assurance checks carried out by Deputy Network *Managers and the Networks Business Unit and the release of data by the Fun*ctional Managers. These reports are used by Operations Service function to compile a DG3 register for each month and corresponding KPIs.

The following reports are generated by Operations Services for Management information:

- DG3 monthly.
- Interruption to Supply KPIs.
- Annual DG3 Supply Interruption Report (developed to mirror the current AIR – Table 2 report as set out in the Annual Information Return Reporting Requirements and Definitions Manual 2010, Issue 1.0 – March 2010).

6.2 Development of the DG3 Register and KPIs

Interruption data for each month is collected from 3 different sources (as described above) into a "Composite Interruption Data" spreadsheet held in Operations Services in NIW Head Office. Interruption data from these sources is combined into an "Interruption Record – Month "worksheet and is held as the combined data record for that particular month.

The interruption data record is transferred to an "Interruption Record – Amended" worksheet where the raw data is examined for errors, anomalies duplications etc. These are re-classified if necessary and highlighted in red. The data is then categorised into the different interruption categories. These are: Unplanned Interruptions, Planned and Warned, Third Parties and Overruns.

The amended interruption data is transferred to the "DG3 Register – Month" worksheet. Here the records are sub categorised into their time bandings, e.g. >3hrs, >6hrs, >12hrs, >24hrs for each category. This then forms the DG3 Register for that particular month.

The interruption data held on the DG3 Register that pertains to the AIR10 Reports and KPIs is transferred to the "AIR10 Return & KPI "worksheet. This worksheet is in the form of two tables. The first is the extract from the AIR10 Table 2 – "Properties affected by supply interruptions". The table is expanded to allow for appropriate inputs for each month. These are recorded and summated at the end of the reporting year to provide the figure for the input into the AIR10 table for that particular line.

The second table contains the relevant DG3 Register information, recorded on a monthly basis, that is used to calculate the KPIs. There are 3 KPIs pertaining to the DG3 register. These are:

- Unplanned interruptions > 6hrs.
- Unplanned interruptions > 12hrs.
- Unplanned interruptions > 24hrs.
- (Unplanned Interruptions include third party interruptions and overruns).

These are expressed as percentages of total properties. These KPIs are calculated and monitored on monthly basis.

6.3 Regulatory Report

The Finance & Regulation Directorate will report to Northern Ireland Authority for the Utility Regulation (NIAUR) on an annual basis.

7.0 Methodology for Estimating the Number of Properties Affected by Frozen Service Pipes in 2009/10

A service pipe may be frozen in one of three ways:

1. Communication pipe frozen – NI Water responsible.

2. Supply pipe frozen – Customer responsible.
3. Communication pipe and supply pipe frozen – NI Water responsible.

During the freeze/thaw, a limited number of investigations were conducted in order to establish the extent of frozen pipe problems at certain properties. The results of these investigations remain the only firm evidence in support of the extent to which the company or the customer was responsible.

If the results are viewed as a sample representing all frozen pipe problems, then knowing the total number of problems, the numbers of company and customer related problems can be estimated.

In the absence of a more complete set of records, NI Water has taken the decision to estimate numbers by following the process described and to review the way it establishes and records the extent of frozen pipes for future reporting.

The sample consists of **66** random investigations into the extent of frozen pipe problems.

The following table provides details of the 66 excavations.

Reference	Area	Address	Findings
001	Londonderry	[redacted] Dungiven	Supply pipe frozen
002	Londonderry	[redacted] Dungiven	Supply pipe frozen
003	Londonderry	[redacted] Dungiven	Supply pipe frozen
004	Londonderry	[redacted] Dungiven	Supply pipe frozen
005	Londonderry	[redacted] Dungiven	Supply pipe frozen
006	Londonderry	[redacted] Kilfennan	Supply pipe frozen
007	Londonderry	[redacted], Coleraine	Supply pipe frozen
008	Magherafelt	[redacted] Magherafelt	Supply pipe frozen
009	Magherafelt	[redacted] Cookstown	Supply pipe frozen
010	Magherafelt	[redacted] Moneymore	Supply pipe frozen
011	Magherafelt	[redacted] Moneymore	Supply pipe frozen
012	Ballygawley	[redacted] Fivemiletown	Supply pipe frozen
013	Ballygawley	[redacted] Ballygawley	Supply pipe frozen
014	Ballygawley	[redacted] Newmills	Communication pipe frozen
015	Ballygawley	[redacted] Carrickmore	Supply pipe frozen
016	Omagh	[redacted] Omagh	Supply pipe frozen
017	Omagh	[redacted] Omagh	Supply pipe frozen
018	Omagh	[redacted], Omagh	Supply pipe frozen
019	Omagh	[redacted] Omagh	Supply pipe frozen
020	Omagh	[redacted] Omagh	Communication pipe frozen
021	Omagh	[redacted] Trillick	Supply pipe frozen
022	Omagh	[redacted], Omagh	Supply pipe frozen
023	Omagh	[redacted], Omagh	Communication pipe frozen

Reference	Area	Address	Findings
024	Omagh	[redacted], Omagh	Supply pipe frozen
025	Omagh	[redacted] Omagh	Communication pipe frozen
026	Omagh	[redacted] Omagh	Communication pipe frozen
027	Omagh	[redacted] Dromore	Supply pipe frozen
028	Omagh	[redacted] Dromore	Supply pipe frozen
029	Omagh	[redacted] Lammy	Communication pipe frozen
030	Omagh	[redacted] Omagh	Supply pipe frozen
031	Omagh	[redacted] Omagh	Supply pipe frozen
032	Omagh	[redacted] Omagh	Supply pipe frozen
033	Omagh	[redacted] Omagh	Communication pipe frozen
034	Omagh	[redacted] Trillick	Communication pipe frozen
035	Omagh	[redacted] Dromore	Supply pipe frozen
036	Ballymena	[redacted] Ballymoney	Communication pipe frozen
037	Ballymena	[redacted] Ballymoney	Communication pipe frozen
038	Ballymena	[redacted] Ballymoney	Communication pipe frozen
039	Ballymena	[redacted] Ballnamore	Communication pipe frozen
040	Ballymena	[redacted] Ballymena	Supply pipe frozen
041	Ballymena	[redacted], Ballymena	Supply pipe frozen
042	Ballymena	[redacted] Kells	Supply pipe frozen
043	Ballymena	[redacted]	Supply pipe frozen
044	Ballymena	[redacted]	Supply pipe frozen
045	Ballymena	[redacted]	Supply pipe frozen
046	Ballymena	[redacted] Ahoghill	Supply pipe frozen
047	Ballymena	[redacted]	Supply pipe frozen
048	Enniskillen	[redacted] Lack	Communication pipe frozen
049	Enniskillen	[redacted] Edern	Communication pipe frozen
050	Enniskillen	[redacted]	Communication pipe

Reference	Area	Address	Findings
		Kesh	frozen
051	Enniskillen	[redacted] Kesh	Communication pipe frozen
052	Enniskillen	[redacted] Kesh	Communication pipe frozen
053	Enniskillen	[redacted] Kesh	Supply pipe frozen
054	Enniskillen	[redacted] Kesh	Supply pipe frozen
055	Enniskillen	[redacted] Drumskinney	Communication pipe frozen
056	Enniskillen	[redacted] Kesh	Communication pipe frozen
057	Enniskillen	[redacted] Irvinestown	Communication pipe frozen
058	Enniskillen	[redacted] D/G	Communication pipe frozen
059	Enniskillen	[redacted] D/G	Communication pipe frozen
060	Enniskillen	[redacted] D/gonnelly	Communication pipe frozen
061	Enniskillen	[redacted] Blaney	Communication pipe frozen
062	Enniskillen	[redacted] Kinawley	Communication pipe frozen
063	Enniskillen	[redacted] Tempo	Communication pipe frozen
064	Eastern Area	[redacted] Belfast	Communication pipe frozen
065	Eastern Area	[redacted], Lisburn	Communication pipe frozen
066	Eastern Area	[redacted] Banbridge	Supply pipe frozen

According to the results of the excavations,

- 28 excavations found that the communication pipe was frozen (42%). Note that in most cases the supply pipe was also frozen.
- 38 excavations found that the supply pipe was frozen (58%).

The total number of problems relating to frozen pipes was determined as follows:

1. 55,280 calls were logged at the Customer Response Centre between 21 December and 21 January. These calls were transposed by CRC staff into the Ellipse system. As a result, 13,397 “No Water” complaints were input into the Ellipse system for action. It is noted that duplicate calls made by customers were linked to the original calls and that CRC were still receiving “non-incident” calls e.g. meter consumption and account queries, septic tank emptying requests, blocked sewer reports, etc.

2. A report was derived from Ellipse listing the 13,397 Work Requests created during the reporting period (24-12-2009 to 21-01-2010) with a Request Type of “NO - No Water”.

3. Records were sorted according to Date and Address fields and filtered to remove duplicate records. The number of records remaining after this process was **5,316**.

4. Records were removed if they related to areas that experienced operational difficulties such as bursts, empty reservoirs and non-functioning pumping equipment. These records were identified as a result of Field Manager reviews and OMIS and Upward report comparisons. The number of records remaining after this process was **3,724**. This represents the estimated number of no water complaints received by the Company as a result of frozen pipes.

By applying the earlier percentages, the Company has estimated the numbers of frozen communication pipes and frozen supply pipes.

(3,724 / 100) x 42 = **1,564** communication pipes frozen (NIW responsibility)
(3,724 / 100) x 58 = **2,160** supply pipes frozen (customer responsibility)

Assumption: It is not known how long interruptions lasted relating to frozen pipes. The company has therefore assumed that in each instance, the interruption would have lasted for more than 24 hours.

The numbers of properties affected by interruptions lasting longer than 3, 6, 12 and 24 hours have been increased by 1,564.

1.2 Appendix A – DG3 Interruption to Supply - Roles & Responsibilities

Customer Relations Centre (Normal Hours)

- Log 'no water'/ 'burst main' complaints into RapidXtra system.

Operations - Networks Water

- The Networks Business Unit is responsible for the procurement of information for DG3 within the Networks function. The Business Unit is supported by three functional managers.

Operations - Leakage Services

- The deputy leakage managers are responsible for the procurement of information for DG3 within the leakage function.

Engineering and Procurement E&P

- The E&P Directorate are responsible for the installation of new watermains. Interruptions to supply arise as a result of connecting properties to the new watermains.

Customer Services Directorate

- The CSD is responsible for meter maintenance and the installation of new meters. An interruption to supply to the property arises during the course of the installation.
- Customer Relations Centre Front Desk (Tel: 028 [redacted] or 028 [redacted]).

Operations Services

Operations Services is responsible for the following:

- Receipt of all interruption information from Networks Water, Leakage, E&P and CSD,
- Compiles each set of information into the DG3 register,
- Audits Data,
- Produces reports for Management and Regulator,
- KPIs.

Telemetry Control Centres (Out of Hours)

Log 'no water'/'burst main' complaints into Work Planning (Ellipse) system and inform on call supervisor immediately.

- Westland Telemetry Control Centre (Tel: 028 [redacted]) (or Ext: [redacted])

TCC E-mail Addresses:-

[redacted]

[redacted]

Altnagelvin Telemetry Control Centre (Tel : 028 [redacted] or Ext [redacted], [redacted])

Work Planning Units

- Normal hours – create a Work Order and inform area supervisor immediately.
- Update the Ellipse System following 'status calls'.
- Ensure Work Orders are closed out.

Contact details:

North West – [redacted]
South East – [redacted]

Networks Ops Water - Local Area Managers / Deputy Network Managers

- Inform CSD and Work Planners of planned interruption providing details of area & number of properties affected and proposed duration of interruption.
- Assess extent of unplanned interruptions and organise remedial work.
- Inform Work Planners on completion of remedial work.
- Record interruption details as an entry into OMIS Interruption System.
- Provide supporting information on number of properties affected and reasons for interruption.
- Record details of interruptions received from on-call staff.
- Deputy Network Managers to carry out audit checks on OMIS entries and Interruption Register.
- Deputy Network Managers to advise Functional Managers following the quality assurance and compliance checks.

Networks - On-call Staff

- Assess extent of unplanned interruptions, update Duty Officer (if required) and organise remedial work.
- Inform Local Networks Area Manager of actions taken and interruption details.

Network Functional Managers

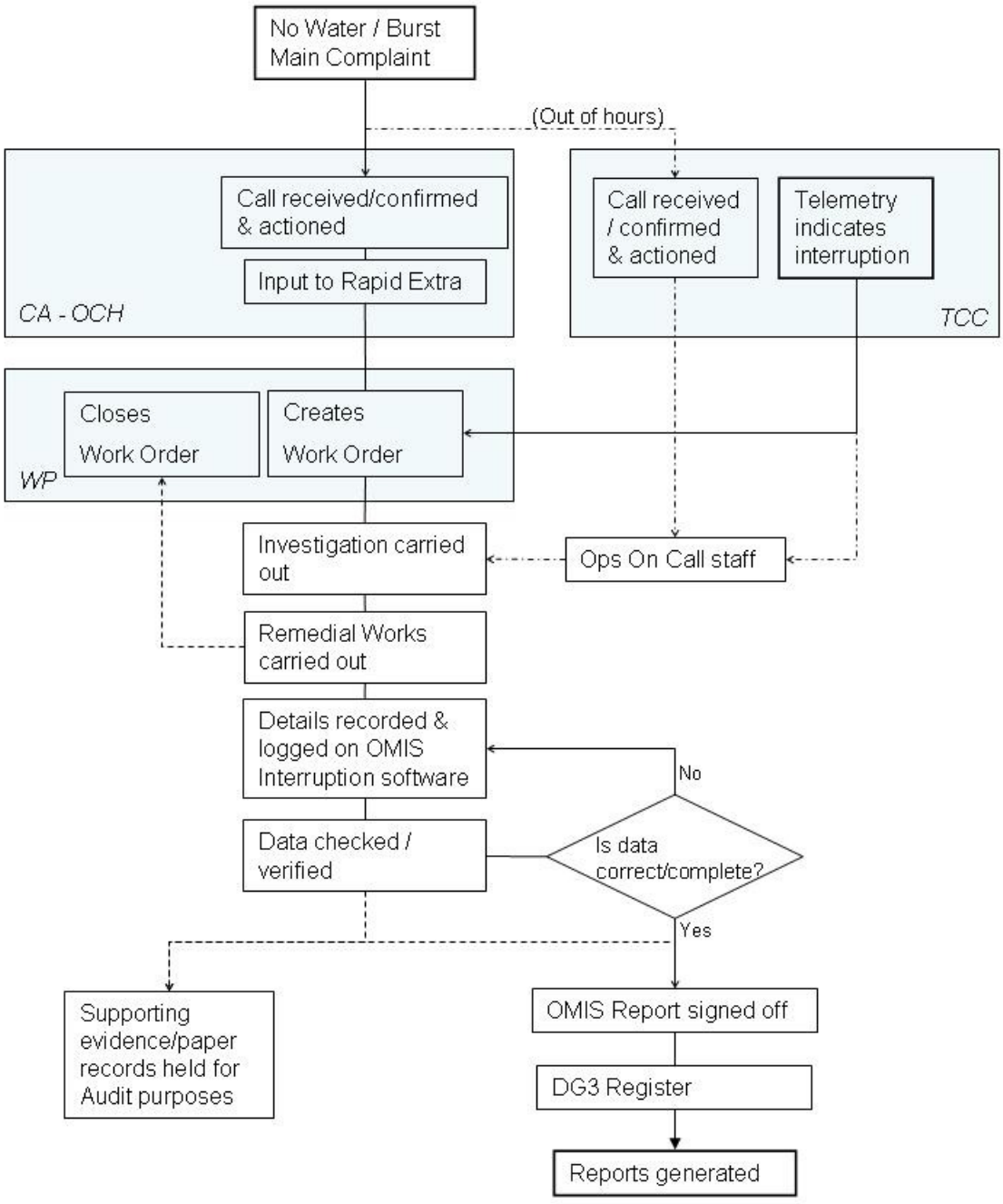
- Approve OMIS Interruption Register and release data for reporting purposes.

Regulation & Business Performance Section

- Submit Annual Report to NIAUR.

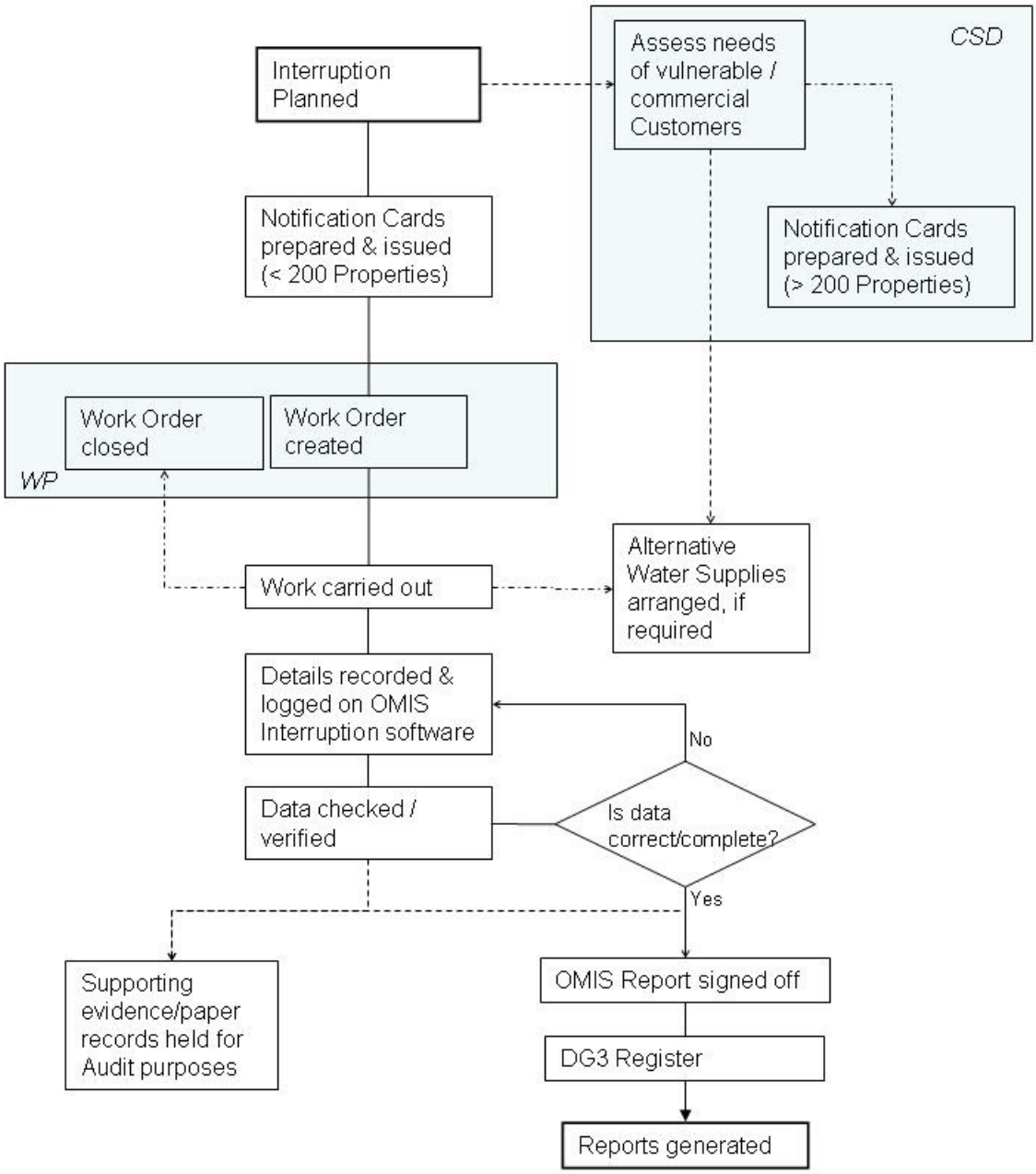
DG3 Process Flow Diagram - Unplanned

Appendix B

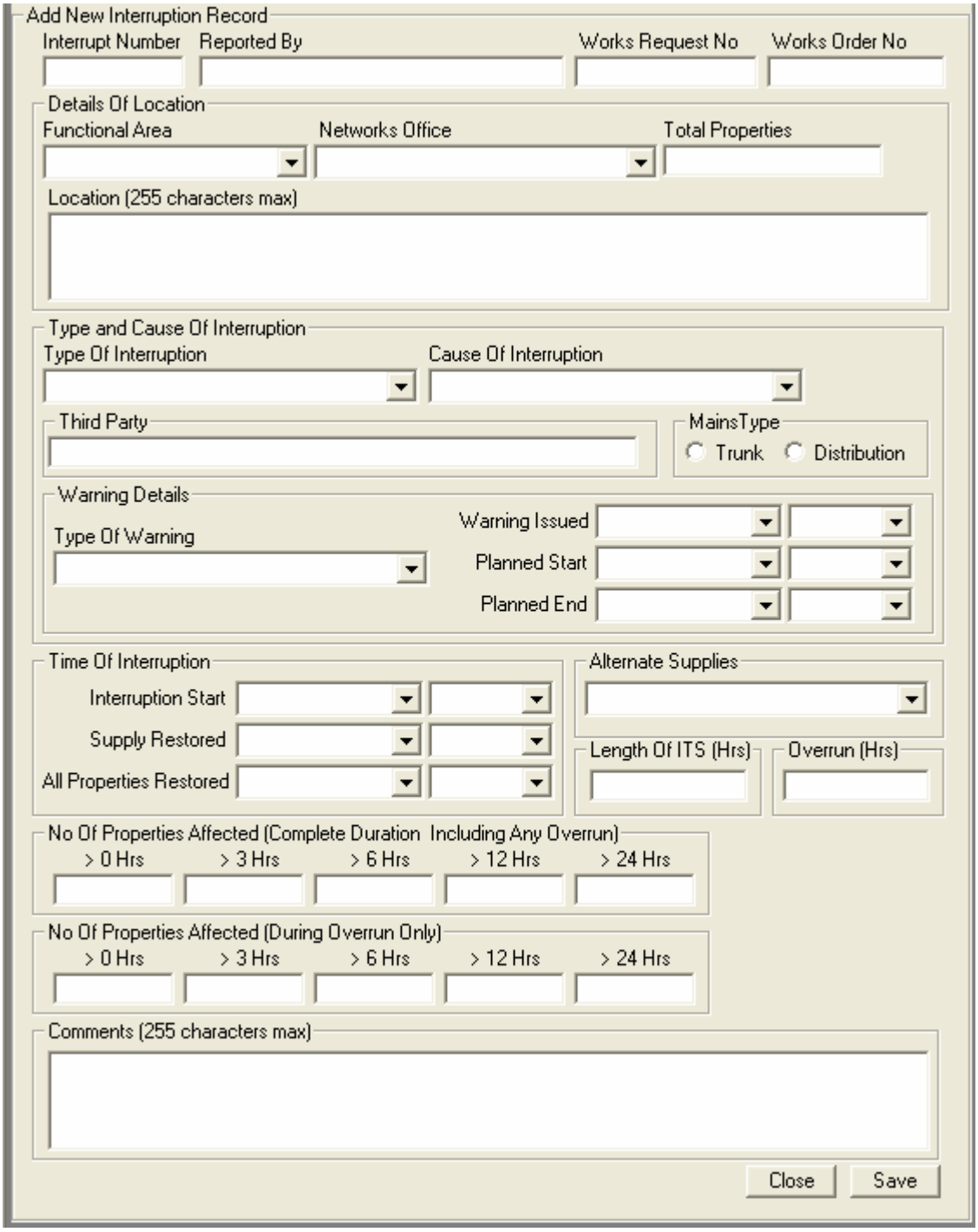


DG3 Process Flow Diagram - Planned

Appendix C



Appendix D – Proforma - Interruption Information Sheet



Northern Ireland Water

Level of Service Methodology AIR 10

DG5 Flooding

Contents

1. Introduction

Objective and Aim

Companies must maintain verifiable records for DG5. The aim of the records is to provide an auditable method for identifying the specific, properties which are affected by flooding or are at risk of experiencing flooding.

As part of these records companies must maintain a DG5 register which should form a database of all properties which are at risk of experiencing sewer flooding more than once in twenty years. It will enable the identification by address of individual properties which are below the reference level and should also contain information on (for example) complaints and the results of their investigation, problems which are attributable to customers apparatus and properties which experience sewer flooding but are covered by one of the allowable exclusions.

The register must clearly identify those properties below the reference level, distinguish them from those which have flooded but are not below the reference level and provide a verifiable reason for the exclusion (e.g. flooding was a result of a blockage).

The records should include:

- date of incident;
- properties affected identified by address;
- cause of flooding (including source and reason, where known);
- action taken;
- name of persons completing the records; and
- the 'at risk' category for reporting under DG5.

If a property on the register is not reported as being at risk under DG5, the reason should be stated.

The DG5 register is in the process of being developed and during the course of the development it has been necessary to run a 2 tire approach for the determination on internal flooding incidents namely Historical Data and 'LiveData' i.e. data captured for the reporting year of 2009/2010. See Line-Specific Methodology Statement.

Reporting Requirements

Four main outputs are required to be produced relating to the flooding for AIR 10;

- DG5 Annual Flooding Summary – properties internally flooded as a result of overloaded sewers and other causes.
- DG5 Properties on the 'at risk' register – properties at risk of flooding due to overloaded sewers, more frequently than once in twenty years and once or twice in ten years, requiring further investigation, problem status of properties on the register, annual changes to the register.

- DG5 Annual External Flooding Summary – includes areas externally flooded as a result of overloaded sewers and other causes.
- DG5 Areas on the External 'at risk' register – areas at risk of flooding more frequently than once in twenty years and once or twice in ten years, problem status of the external areas on the register, annual changes to the register.

The information relating to the above are contained in Tables 3 and 3A of the AIR09 Return. See Appendix A.

Definitions

Flooding incidents: For the purpose of the return, a flooding incident is defined as an event of internal flooding (as defined below) from a public sewer (whether foul, combined or surface water).

Internal flooding: For the purposes of DG5, internal flooding is defined as flooding which enters a building or passes below a suspended floor. For reporting purposes, buildings are restricted to those normally occupied and used for residential, public, commercial, business or industrial purposes.

Buildings whose prime purpose is storage or installation of domestic appliances are excluded. This exclusion encompasses both:

- Detached garages (whether situated inside the boundary of the property and separated from the main building or outside the boundary but with common access as in a garage block); and

- Linked detached garages (i.e. garages which are attached to a property but separated from it by an external passageway).

However, garages forming an integral part of a property are classed as part of the building and are included, even if their prime purpose is storage, etc.

Overloaded sewers: A sewer is overloaded when the flow from a storm is unable to pass through it due to a permanent problem (e.g. flat gradient, small diameter). Temporary problems such as blockages, siltation, collapses and equipment or operational failures are excluded. No account should be taken of the severity of the storm causing the incident.

Properties at risk: These are defined as properties that have suffered or are likely to suffer internal flooding from public foul, combined or surface water sewers due to overloading of the sewerage system more frequently than the relevant period (either once in twenty years or once or twice in ten years).

Severe weather: All flooding incidents should be reported irrespective of the severity of the storm. Companies may indicate in the commentaries when flooding incidents have been due to severe rainfall and this information will be taken into account when producing the 'Levels of service' report.

Uninhabited cellars: An uninhabited cellar is defined as an integral part of a building that is at least partially below ground level. It is not used for habitation. Where such a cellar is in regular use as part of the normal living accommodation it is termed a basement and any flooding should be reported as a normal internal flooding incident.

Reporting
NIW Reports -The following reports are generated by Operations Services for Management information:

DG5 (Internal and External) Annual Flooding Summary - Annual
DG5 (Internal and External) Properties on the Risk Registers - Annual
Monthly Reports for NIW Executive Team
Nr of overloaded sewers (Hydraulic Capacity Problems)
Nr of Overloaded Sewers (Blockage, Collapsed Sewer, Equipment failure)
Nr of Properties on the 1 in 10 year at risk Register.

Regulatory Report
The Finance & Regulation Directorate will report to Northern Ireland Authority for the Utility Regulation (NIAUR) on an annual basis.

Situation at March 2010
The DG5 Registers are in the process of being developed using historic and current flooding records, of varying quality, dating back to 2000. These initially contained 1,600 records in the Internal Database and 40,000 records in the External Database. In order to develop a DG5 Database each of the records contained in each of the databases has to be investigated to see if the flooding information meets the DG5 Criteria. Records are then determined as being DG5 Reportable and are assigned to an appropriate "At Risk" register. Those records that do not meet the DG5 Criteria are recorded in the "excluded" section of the Database. It was proposed to have 100% of the initial Internal flooding records investigated and determined by October 2008, which was achieved. 100% of the initial external flooding is to be determined by October 2010.

2. DG5 Flooding incidents

Internal
Data gathering and calculation is as described below.
Sources/Process for all lines 2 to 11
A download of internal sewer flooding records was obtained from the Ellipse system or the period April 09 to March 10 on a month by month basis.
The records were sorted firstly by Creation Date field, then by Street Name field, then by Property Number field, and finally by Town/City field.
Investigations were carried out for each reported incident and those properties found not be flooded after investigation using information from the Sewer Maintenance Contractor, Flooding Report Forms, Field Manager reports and contacting the Customers directly, are removed, the remaining properties were combined for a yearly total.

Assumption
For the purpose of AIR09, NIW has assumed that a single incident includes recorded complaints from the same property on the same day or within three days.
"Three days" was chosen on the basis that a noticeable volume of repeat calls tends to be received within three days of an incident occurring. There is then a much longer passing of time before calls are again received from the same locality, suggesting that the original incident has passed and that the calls relate to a different incident.

Lines 2, 3, 6, 8, 9 and 10
A count was then made on these records that represented one internal flooding complaint per unique property, meaning that properties affected by more than one incident were reported only once, as per the definition.

These properties were then sub-divided into the appropriate categories for lines 2, 3, 6, 8, 9 and 10 using the information gathered from, the Sewer Maintenance Contractor, Flooding Report Forms, Field Manager reports and contacting the Customers directly.

Line 4
A sort was carried out on all addresses to eliminate properties with 'flooding other causes' as found from the investigations using the information gathered from the Sewer Maintenance Contractor, Flooding Report Forms, Field Manager reports and contacting the Customers directly.

The remaining properties are those either flooded due to overloaded sewers or flooding due to overloaded sewers attributed to severe weather.
A Met Office report was obtained for each of these lines to ascertain if the cause of the internal flooding was due to weather conditions.

As per the definition this line's enumeration includes flooding incidents caused by severe storms which affect properties that are **not** at risk of flooding more frequently than once in ten years therefore a check was made on historical records to determine this.

Lines 5 and 11
As stated in last year's methodology. From JR08 for England and Wales, it is reasonable to report zero properties for cellar flooding. Given that NI is not likely to have as many properties with cellars as in parts of England and Wales and that such detailed information is unavailable for NIW's property flooding records derived from Ellipse or the returned Flooding Incident Report Forms, the decision has been taken to assume zero properties for cellar flooding

In addition the Flooding Incident Report Form has now been amended to capture the required detail for flooding of cellars and NIW should be in a position to report on these lines for AIR11.

Line 7
A count was then made on these records that represented one internal flooding complaint per unique property identified as caused by blockage, collapse or equipment failure.

These annual records were combined with the list of historical records stating cause of flooding to be blockage, collapse or equipment failure

A sort on the date of incident field and address field gave the number of properties that have flooded more than once in the last 10 years due to other causes.

Changes in Methodology over the Previous Year
As stated NIW's' Flooding register is still at the development stage with only partial reporting capability. It is our aim to move towards full flooding reporting capability. Therefore as recommended by the regulator properties flooded (Other Causes) have been to 'requiring further investigation line'. These will be investigated as part of the remit of the newly created a DG5 expert panel comprised of key personnel.
Initially, the role of the DG5 panel is to provide a forum in which all areas of the business can feed into the flooding register development exercise for both internal and external flooding. However, as the Flooding Register and supporting business processes develop, the focus of this panel will shift to agreeing additions to and removals from the DG5 register, while ensuring the business process is maintained at all levels.
NIW are currently agreeing a programme for the development of the Flooding register along with methodologies, processes, definitions and roles and responsibilities.
NIW will work towards full reporting capability for both internal and external flooding incidents before the end of the PC10 period.

External
Data gathering and calculation is as described below
Sources/Process for all lines all Lines 1 to 11
Data gathering and calculation is as described below

Lines 1 & 7
Sources/Primary Process
1. A download of external sewer flooding records was obtained from the Ellipse system for the period April 09 to March 10.
2. The records were sorted firstly by Date field, then by Property Number field, then by Street Name field and finally by Town field.

The purpose of this initial sorting process was to ensure that records relating to the same external area were grouped together and records relating to the same incident were also grouped together. The order in which records were arranged was as follows:-

- Records representing complaints regarding the same external area on the same day.

- Records representing complaints regarding the same external area on different days.
- Records representing complaints regarding neighbouring external areas in the same street on the same day.
- Records representing complaints regarding neighbouring external areas in the same street on different days.
- Records representing complaints regarding external areas in neighbouring streets on the same day.
- Records representing complaints regarding external areas in neighbouring streets on different days

3. A string of text was created for each record consisting of the contents of the Property Number field, the Street Name field and the Town field in that order.
4. A query was created returning a response of "True" in row 1 if the string of text in row 2 equalled the string of text in row 1.
5. The dates of consecutive records were subtracted to give a value in row 1 (i.e. row 2 date minus row 1 date, etc).
6. Records with "0", "1", "2" or "3" subtraction results and "True" responses were eliminated.

Note: Records returning "0" and "True" responses represented complaints from the same property on the same day. Records returning "1" and "True" responses represented complaints from the same property within one day, etc.

Assumption
For the purpose of AIR10, NIW has assumed that a single incident includes recorded complaints from the same property on the same day or within three days.

"Three days" was chosen on the basis that a noticeable volume of repeat calls tends to be received within three days of an incident occurring. There is then a much longer passing of time before calls are again received from the same locality, suggesting that the original incident has passed and that the calls relate to a different incident.

7. The remaining records were representative of one external flooding complaint per unique property per unique external flooding incident.

The remaining records may have included properties flooded both internally and externally during the same event.

8. The records were labelled as "External" and combined with the confirmed annual "Internal" records (also labelled) and representative of one internal flooding complaint per unique property per unique internal flooding incident.
9. The records were sorted firstly by Date field, then by Property Number field, then by Street Name field and finally by Town field.

10. A string of text was created for each record consisting of the contents of the Property Number field, the Street Name field and the Town field in that order.
11. A query was created returning a response of "True" in row 1 if the string of text in row 2 equalled the string of text in row 1.
12. The responses to the above query were copied to another column and dropped down one cell.
13. The dates of consecutive records were subtracted to give a value in row 1 (i.e. row 2 date minus row 1 date, etc).
14. All internal records were eliminated.
15. External records were also eliminated but only if they returned a value of "0", "1", "2" or "3" and "True".
16. The remaining records were representative of one external flooding complaint per unique property per unique external flooding incident.

The remaining records did not include properties flooded both internally and externally during the same event.

Sources/Secondary Process

1. Records representative of one external flooding complaint per unique property per unique external flooding incident were derived using the Primary Process previously described.
2. A string of text was created for each record consisting of the contents of the Property Number field, the Street Name field and the Town field in that order.
3. A query was created returning a response of "True" in row 1 if the string of text in row 2 equalled the string of text in row 1.
4. Records with "True" responses were eliminated.
5. The remaining records were representative of one external flooding complaint per unique property, meaning that external areas affected by more than one incident were reported only once, as per the definition. The remaining records were apportioned using the following process:-

Assumption – Apportionment

The raw data for this return has been derived from the Ellipse system and is typical of that provided by the customer only. As such, the cause of flooding is undetermined in each case and the extent of flooding is also undetermined. The decision has been taken to base the apportionment of data on averages for England and Wales since it is thought that this would give the best approximation to apportionment based on actual causes and extents.

Lines 2, 3, 4 & 5

Sources/Secondary Process

1. Records representative of one external flooding complaint per unique property per unique external flooding incident were derived using the Primary Process previously described.
2. The Street Name field was split into two separate fields (SN1 and SN2).
3. A string of text was created for each record consisting of the contents of the SN1 field and the contents of the Town field in that order.

4. A query was created returning a response of “True” in row 1 if the string of text in row 2 equalled the string of text in row 1.
5. The dates of consecutive records were subtracted to give a value in row 1 (i.e. row 2 date minus row 1 date, etc).
6. Records with “0”, “1”, “2” or “3” subtraction results and “True” responses were eliminated.

Note: Records returning “0” and “True” responses represented complaints from the same external area, neighbouring external area or neighbouring street on the same day. Records returning “1” and “True” responses represented complaints from the same external area, neighbouring external area or neighbouring street within one day, etc.

Assumption
For the purpose of AIR10, NIW has assumed that a single incident includes recorded complaints from the same property, neighbouring properties and neighbouring streets on the same day or within three days.

“Three days” was chosen on the basis that a noticeable volume of repeat calls tends to be received within three days of an incident occurring. There is then a much longer passing of time before calls are again received from the same locality, suggesting that the original incident has passed and that the calls relate to a different incident.

7. The remaining records were representative of one external flooding complaint per unique external flooding incident. The remaining records were apportioned using the following process:-

Assumption – Apportionment
The raw data for this return has been derived from the Ellipse system and is typical of that provided by the customer only. As such, the cause of flooding is undetermined in each case and the extent of flooding is also undetermined. The decision has been taken to base the apportionment of data on averages for England and Wales since it is thought that this would give the best approximation to apportionment based on actual causes and extents.

Line 6
Sources/Secondary Process
1. Records representative of one external flooding complaint per unique property per unique external flooding incident were derived using the Primary Process previously described.
2. The Street Name field was split into two separate fields (SN1 and SN2).
3. A string of text was created for each record consisting of the contents of the SN1 field and the contents of the Town field in that order.
4. A query was created returning a response of “True” in row 1 if the string of text in row 2 equalled the string of text in row 1.
5. The dates of consecutive records were subtracted to give a value in row 1 (i.e. row 2 date minus row 1 date, etc).
6. Records with “0”, “1”, “2” or “3” subtraction results and “True” responses were eliminated.

Note: Records returning “0” and “True” responses represented complaints from the same external area, neighbouring external area or neighbouring street on the same day. Records returning “1” and “True” responses represented complaints from the same external area, neighbouring external area or neighbouring street within one day, etc.

Assumption
For the purpose of AIR10, NIW has assumed that a single incident includes recorded complaints from the same property, neighbouring properties and neighbouring streets on the same day or within three days.

“Three days” was chosen on the basis that a noticeable volume of repeat calls tends to be received within three days of an incident occurring. There is then a much longer passing of time before calls are again received from the same locality, suggesting that the original incident has passed and that the calls relate to a different incident.

7. The remaining records were representative of one external flooding complaint per unique external flooding incident. The remaining records were apportioned using the following process:-

Assumption – Apportionment
1. The raw data for this return has been derived from the Ellipse system and is typical of that provided by the customer only. As such, the cause of flooding is undetermined in each case and the extent of flooding is also undetermined. The decision has been taken to base the apportionment of data on Monthly weather assessment reports for Northern Ireland which were obtained from the Met Office site for the period April 08 to March 09.

Example:-
http://www.metoffice.gov.uk/climate/uk/2008/january.html
Northern Ireland diary of highlights

2. The reports were studied and references to heavy rain or flooding were extracted from the main body of text.
3. The extracts were further studied with a view to acquiring dates on which the province as a whole or parts of the province were subject to severe weather. Therefore the number of heavy rainfall days was extracted and the proportion of external flooding incidents was proportioned accordingly across heavy rainfall and non-heavy rainfall days.

Line 8
Sources
1. A download of external sewer flooding records was obtained from the Ellipse system for the period April 09 to March 10.
2. The Ellipse records were combined with all historical flooding records from the External Flooding Database, less any Ellipse records already included.

Historical flooding records included all determined and undetermined records at 31 March 2009.

NOTE: At this stage of the process, it was necessary to go through the same process of elimination as described in the Line-Specific Methodology Statement for Table 3a: Lines 1 & 7. This was to ensure that properties flooded both internally and externally during the same flooding event were only recorded on the internal incident flooding summary.

3. The records were sorted firstly by Date field, then by Property Number field, then by Street Name field and finally by Town field.

The purpose of this initial sorting process was to ensure that records relating to the same external area were grouped together and records relating to the same incident were also grouped together. The order in which records were arranged was as follows:-

- Records representing complaints regarding the same external area on the same day.
- Records representing complaints regarding the same external area on different days.
- Records representing complaints regarding neighbouring external areas in the same street on the same day.
- Records representing complaints regarding neighbouring external areas in the same street on different days.
- Records representing complaints regarding external areas in neighbouring streets on the same day.
- Records representing complaints regarding external areas in neighbouring streets on different days.

4. A string of text was created for each record consisting of the contents of the Property Number field, the Street Name field and the Town field in that order. (This was used to determine the number of unique properties per incident.
5. A query was created returning a response of “True” in row 1 if the string of text in row 2 equalled the string of text in row 1.
6. The responses to the above query were copied to another column and dropped down one cell.
7. The dates of consecutive records were subtracted to give a value in row 1 (i.e. row 2 date minus row 1 date, etc).
8. Records with “0”, “1”, “2” or “3” subtraction results and “True” responses were eliminated.

Note: Records returning “0” and “True” responses represented complaints from the same property on the same day. Records returning “1” and “True” responses represented complaints from the same property within one day, etc.

Assumption
For the purpose of AIR10, NIW has assumed that a single incident includes recorded complaints from the same property on the same day or within three days.

"Three days" was chosen on the basis that a noticeable volume of repeat calls tends to be received within three days of an incident occurring. There is then a much longer passing of time before calls are again received from the same locality, suggesting that the original incident has passed and that the calls relate to a different incident.

9. Records with "False" "True" responses were eliminated.

These records represented the most recent complaints from properties having made multiple complaints. Records become redundant once they have been compared with the records directly above.

10. Records with "False" "False" responses were eliminated.

These records represented external areas flooded once in the last 10 years.

11. Records with subtraction results in excess of "3650" and "True" responses were eliminated.

These records represented external areas flooded more than once in excess of 10 years.

12. Records were retained if they returned a subtraction result between "4" and "3650" inclusive and "True" responses.

These records represented external areas flooded more than once in the last 10 years. However, the same area could have appeared more than once, once for every separate incident.

13. Records were again sorted by Property Number field, Street Name field and Town field to ensure the order was correct for the next stage in the process.
14. A query was created returning a response of "True" in row 1 if the string of text in row 2 equalled the string of text in row 1.
15. Records with "True" responses were eliminated.
16. The remaining records were representative of one external flooding complaint per unique property.

Assumption – Apportionment
The decision has been taken to base the apportionment of data on averages for England and Wales since it is thought that this would give the best approximation to apportionment based on actual causes and extents.

Lines 9, 10 & 11
Sources/Secondary Process

1. Records representative of one external flooding complaint per unique property per unique external flooding incident were derived using the Primary Process previously described.
2. The Street Name field was split into two separate fields (SN1 and SN2).
3. A string of text was created for each record consisting of the contents of the SN1 field and the contents of the Town field in that order.
4. A query was created returning a response of "True" in row 1 if the string of text in row 2 equalled the string of text in row 1.
5. The dates of consecutive records were subtracted to give a value in row 1 (i.e. row 2 date minus row 1 date, etc).
6. Records with "0", "1", "2" or "3" subtraction results and "True" responses were eliminated.

Note: Records returning "0" and "True" responses represented complaints from the same external area, neighbouring external area or neighbouring street on the same day. Records returning "1" and "True" responses represented complaints from the same external area, neighbouring external area or neighbouring street within one day, etc.

Assumption
For the purpose of AIR10, NIW has assumed that a single incident includes recorded complaints from the same property, neighbouring properties and neighbouring streets on the same day or within three days.

"Three days" was chosen on the basis that a noticeable volume of repeat calls tends to be received within three days of an incident occurring. There is then a much longer passing of time before calls are again received from the same locality, suggesting that the original incident has passed and that the calls relate to a different incident.

7. The remaining records were representative of one external flooding complaint per unique external flooding incident. The remaining records were apportioned using the following process:-

Assumption – Apportionment
The raw data for this return has been derived from the Ellipse system and is typical of that provided by the customer only. As such, the cause of flooding is undetermined in each case and the extent of flooding is also undetermined. The decision has been taken to base the apportionment of data on averages for England and Wales since it is thought that this would give the best approximation to apportionment based on actual causes and extents.

Changes in Methodology over the Previous Year
There have been no changes in the methodology from that as reported for AIR 08. The raw data is from the same source i.e. Ellipse Work Management System and figures are derived using the Line- Specific Methodology Statements and calculation sheets. It should be noted that the figures for AIR09 are considerably increased on those presented for AIR08; the only explanation for this may be the very wet summer in 2008.

As the data used to populate these lines was obtained from the Ellipse system it is not possible to interrogate the figures shown in Table 3a to satisfy the comments requested in the Utility Regulator guidance notes for Table 3a.

Future Reporting
There are currently approximately 40,000 undetermined records of reported External Flooding NIW proposal is still to have these investigated and determined so that the DG5 External Registers can be suitably populated, target date is now March 2011 because of restructuring within NIW

3. DG5 Properties at risk of flooding

Internal
Data gathering and calculation is as described below
Calculation Process Lines 12 to 15a
Data gathering and calculation is as described below

Sources/Process for incidents reported within reporting year of 2009/2010
A download of internal sewer flooding records was obtained from the Ellipse system for the period April 09 to March 10 on a month by month basis.

The records were sorted firstly by Creation Date field, then by Street Name field, then by Property Number field, and finally by Town/City field.

Investigations were carried out for each reported incident and those properties found not be flooded after investigation using information from the Sewer Maintenance Contractor, Flooding Report Forms, Field Manager reports and contacting the Customers directly, are removed, the remaining properties were combined for a yearly total.

The purpose of this initial sorting process was to ensure that records relating to the same property were grouped together and records relating to the same incident were also grouped together for the same date.

The cause of each confirmed internal flooding incident is confirmed by using the above steps with the records that have been excluded from inclusion to the 'At Risk' register for one or more of the following reasons:

- The cause of flooding was equipment failure;
- The cause of flooding was sewer blockage;
- The cause of flooding was sewer collapse; and/or
- The return period of the storm was more than 1 in 20.

have been identified and a count kept for AIR return and records determined as DG5 Reportable have been assigned to one of three "At Risk" registers – 2 in 10, 1 in 10 or 1 in 20. These "At Risk" registers are held on an MS Excel worksheet along with a section for Excluded records.

Sources/Process for incidents held within NIW Historical Records
The internal flooding Historical Register is a collection of historical events that have taken place since January 2000. Flooding events are recorded as addresses of properties that have been flooded. There are a number of different sources for the information contained in this register of flooding events and the quality of information differs from source to source.

Data sources used to compile the historical records are as follows:
- Central Claims Unit.
- Drainage Area Studies.
- Eastern Division Flooding Records.
- Customer Enquiry management System (CEMS).
- Work Planning System (WPS).
- Captrax.
- Anecdotal Evidence.
- Ellipse.

Because the data was contained in sources that indirectly related to flooding incidents the data is not considered to be good quality.

Determination of historical data was carried out using the available information obtained from the above sources, and was carried out as follows:
- A visual check was made against each incident reading all data held on all sources for each incident at each address.
- Where there was no information written on the cause of flooding this incident was placed by default to the 1:10 register. Pending further investigations.
- Where a mention was made of blockage or equipment failure etc. then this incident was excluded.
- Additional investigations using Operational and Asset management staff were carried out to check each defaulted property against their local knowledge to confirm flooding, a reason for flooding or work has been carried out to alleviate the cause of the flooding.

The addresses remaining therefore have no apparent cause of flooding and will remain defaulted onto the 1:10 register until further investigations into weather conditions or frequency of flooding at each location will move the property from one category to another or remove altogether. The removals of properties will be reported upon on lines T3 lines 20 – 22 for AIR10.

Process
Those properties found to be ‘At Risk’ from records reported this reporting year are combined those the properties found to be at risk from the Historical Records and assigned as follows:
- The number of records assigned to the Internal 2 in 10 “At Risk” Register was counted to give the figure for Line 12.
- The number of records assigned to the Internal 1 in 10 “At Risk” Register was counted to give the figure for Line 13.

- The numbers of records assigned to the Internal 2 in 10 and 1 in 10 "At Risk" Registers were summated to give the figure for Line 14.
- The number of records assigned to the Internal 1 in 20 "At Risk" Register was counted to give the figure for Line 15.

Changes in Methodology over the Previous Year
The DG5 register is in the process of being developed and during the course of the development it has been necessary to run a 2 tier approach for the determination on internal flooding incidents namely Historical Data and 'Live Data' i.e. data captured for the reporting year of 2009/2010. See Line- Specific Methodology Statement.

External
Data gathering and calculation is as described below.

Calculation Process lines 12 to 15
Data gathering and calculation is as described below.

Lines 12, 13, 14 & 15
Reporting Restriction
NIW is currently in the process of determining all records held within the External Flooding Register as either DG5 Reportable or Excluded. Undetermined records are deemed to be under investigation. Therefore, it has only been possible to report on the total number of determined records at 31 March 2009 in this part of the table.

Records determined as DG5 Reportable have been assigned to one of three "At Risk" registers – 2 in 10, 1 in 10 or 1 in 20. These "At Risk" registers are held on an MS Excel worksheet along with a section for Excluded records. Records have been excluded for one or more of the following reasons:-

- The cause of flooding was equipment failure;
- The cause of flooding was sewer blockage;
- The cause of flooding was sewer collapse;
- The return period of the storm was less frequent than 1 in 20; and/or
- The mitigation work is complete and the external area is no longer at risk of flooding.

Process

- The number of records assigned to the External 2 in 10 "At Risk" Register was counted to give the figure for Line 12.
- The number of records assigned to the External 1 in 10 "At Risk" Register was counted to give the figure for Line 13.
- The number of records assigned to the Internal 1 in 20 "At Risk" Register was counted to give the figure for Line 14.
- The numbers of records assigned to the External 2 in 10, 1 in 10 and 1 in 20 "At Risk" Registers were summated to give the figure for Line 15.

Changes in Methodology over the Previous Year

There have been no changes in the methodology from that as reported for AIR 08. NIW has not commenced work on the determination of External records as it was decided for this reporting year to concentrate on Internals. Therefore there has been no increase in the number as quoted for AIR08.

Appendix A – AIR 10 Table 3 Internal Flooding

A	DG5 ANNUAL FLOODING SUMMARY
1	Number of domestic properties connected to sewerage system
	(I) OVERLOADED SEWERS
2	Properties flooded in the year (overloaded sewers)
3	Flooding incidents in the year (overloaded sewers)
4	Flooding incidents (overloaded sewers attributed to severe weather)
5	Props. where flooding limited to uninhabited cellars only (o/loaded sewers)
	(ii) OTHER CAUSES
6	Properties flooded in the year (other causes)
7	Properties which have flooded more than once in the last ten years (other causes)
8	Flooding incidents (other causes - equipment failures)
9	Flooding incidents (other causes - blockages)
10	Flooding incidents (other causes - collapses)
11	Props. where flooding limited to uninhabited cellars only (other causes)

B	DG5 PROPERTIES ON THE AT RISK REGISTER
	(i) AT RISK SUMMARY
12	2 in 10 risk at end of year
13	1 in 10 risk at end of year
14	Total 1 in 10 and 2 in 10 properties at risk at end of year
15	1 in 20 risk at end of year
15a	Potential risk of property flooding identified requiring further investigation to assess at risk category.
16	Props. at risk but not flooded in the past 10 yrs (excluding severe weather)
17	Properties not at risk of flooding internally but suffering restricted toilet use (RTU)
	(ii) PROBLEM STATUS OF PROPERTIES ON THE 1 IN 10 & 2 IN 10 REGISTERS
18	Cost beneficial problems where risk is reduced temporary measures (mitigation)
19	Non cost beneficial problems where risk is reduced by temporary measures (mitigation)
20	Cost beneficial problems without mitigation awaiting solution and those which have not been appraised
21	Non cost beneficial problems without mitigation
	(iii) ANNUAL CHANGES TO 2 IN 10 & 1 IN 10 REGISTERS
22	Removed by company action
23	Removed because of better information
24	Added because of better information
25	Added because of increased demand
	(iv) PROBLEM STATUS OF PROPERTIES ON THE 1 IN 20 REGISTER
26	Cost beneficial problems where risk is reduced temporary measures (mitigation) (1 in 20)
27	Non cost beneficial problems where risk is reduced by temporary measures (mitigation) (1 in 20)
28	Cost beneficial problems without mitigation awaiting solution and those which have not been appraised (1 in 20)
29	Non cost beneficial problems without mitigation (1 in 20)
	(v) ANNUAL CHANGES TO THE 1 IN 20 REGISTER
30	Removed by company action (1 in 20)
31	Removed because of better information (1 in 20)
32	Added because of better information (1 in 20)
33	Added because of increased demand (1 in 20)

Appendix B – AIR 10 Table 3a External Flooding

A	ANNUAL FLOODING SUMMARY
	(I) OVERLOADED SEWERS
1	Areas flooded externally in the year (overloaded sewers)
2	Curtilege flooding incidents in the year (overloaded sewers)
3	Highway flooding incidents (overloaded sewers)
4	Other flooding incidents (overloaded sewers)
5	Total flooding incidents (overloaded sewers)
6	External flooding incidents (overloaded sewers attributed to severe weather)
	(ii) OTHER CAUSES
7	Areas flooded externally in the year (other causes)
8	Areas which have flooded more than once in the last 10 years (other causes)
9	Flooding incidents (other causes - equipment failure)
10	Flooding incidents (other causes - blockages)
11	Flooding incidents (other causes - collapses)

B	AREAS ON THE 1:10, 2:10, 1:20 AT RISK REGISTER
	(I) AT RISK SUMMARY
12	2 in 10 risk at end of year
13	1 in 10 risk at end of year
14	1 in 20 risk at end of year
15	Total at risk on the 1:10, 2:10, 1:20 register at end of year
	(ii) PROBLEM STATUS OF EXTERNAL AREAS ON THE 1:10, 2:10, 1:20 REGISTER
16	Cost beneficial problems where risk is reduced temporary measures (mitigation)
17	Non cost beneficial problems where risk is reduced by temporary measures (mitigation)
18	Cost beneficial problems awaiting solution and problems which have not been appraised
19	Non cost beneficial problems which have not been solved by mitigation
	(iii) ANNUAL CHANGES TO 1:10, 2:10, 1:20 REGISTER
20	Removed by company action (external only)
21	Removed by company action (external linked)
22	Removed because of better information
23	Added because of better information
24	Added because of increased demand
25	Removed from external to internal register

APPENDIX C- Flooding Incident Report

Northern Ireland Water Blockage & Flooding Incident Report

Blockage ☐
U -Cellar
Int. Flooding ☐

Ext. Flooding ☐

Please specify

A. Details of Sewer Blockage Work Order Ref No
……..…

Received – Time ……..…..(24 Hr Clock) Date
……..……

Name ……
Address
……

……

Telephone No.
……

Nature of Complaint
……

Name of NIW Officer notifying Contractor
……

Contractor Notified Time ……(24 Hr Clock) Date
……..

B. Report Section

Contractor's Arrival On Site/Assessment Time……(24 Hr)
Date ……..

Completion Time ……(24 Hr)Date
……..

Method Used – Rodding Yes / No Jetting Yes / No

Cause of Blockage
……
…

……
……..

Confirmation Private/Public Sewer If Private, was work carried out? Yes / No

Is there a fault in the system? Yes / No If Yes, give details
……...
……
…….....

.....
.....

C. Flooding Incident Information (continued overleaf)

1) Internal Flooding (NIW representative must be informed immediately)

Number of buildings where flooding not limited to uninhabited basements
……

Address(es)
……
…….....

……
……

……
……

Number of buildings where flooding limited to uninhabited basements
……..

Address(es)
……
…….....

……
……

……
……

Buildings are restricted to those normally occupied and used for residential, public, commercial, business or industrial purposes, and garages forming an integral part of a property. Detached and linked detached garages are excluded, as are buildings whose prime purpose is storage or installation of domestic appliances.

2) External Flooding :-

Definition: A two metre radius around the point of flooding, usually a manhole.

Number of external areas flooded within the curtilage of residential buildings
(includes detached & linked detached garages)
…….

Address(es)
……
…….....

……
……

……
……

Number of highways flooded (includes roads, footpaths)…….....

Address(es)
……
…….....

……
……

……
……

Number of non-residential external areas flooded (includes schools, commercial
premises, offices, public buildings, open spaces, agricultural land and car parks) ……

Address(es)
……
…….....

……
……

……
……

3) Comments on cause of flooding :-

Blockage ☐ Overloaded Sewer ☐ Collapsed Sewer ☐ M&E Equipment Failure ☐

Defective Private Drain ☐ Septic Tank ☐ Road Gulley ☐

Rivers Agency ☐ Unknown Cause ☐ No Flooding ☐

Comment
……
…….

……
……

……
……

4) Additional Details :-

Exceptional rainfall ☐ Restricted Toilet Use ☐ Previous History ☐

Previous History Comment
…….

……
……

Contractor'sSignature
……

1.3 This form to be completed and signed by Contractor upon completion of work and copy returned to the Work Plan

Northern Ireland Water

Level of Service Methodology

DG6 Response to Billing Contacts

DG6 RESPONSE TO BILLING CONTACTS

1. Methodology and Procedures

1.1 Northern Ireland Water (NIW) has contracted out the provision of Customer Billing and Contacts (CBC) to Echo Managed Services (Echo). Echo is the provider of CBC services to NIW.

1.2 DG6 response to billing contacts (Process Summary):

1. Telephone Contact (go to step 4) or Documentation received (in Capital House).
2. Documentation opened by the Echo Customer Support Team.
3. Scan and Index (documentation only which is archived after scanning).
4. Raise and allocation of CMS contact type.
5. Assess and Investigate.
6. Update and compose response.

1.3 All customer response letters are printed by Echo and dispatched locally. Exceptions to this include correspondence generated through DSTI which are bills (including recalculated bills) and automated recovery letters/correspondence. The process for printing and distribution of bills and other stationery on a daily basis is detailed below:

1.4 Items generated in Rapid:

1.4.1 Information received and updated by the agent, (which automatically updates the system), may trigger the system to create an item of stationery. The agent can also take a course of action (which will manually update the system) and may also trigger an item of stationery. This may include receipt of a leakage form from the customer, Data Protection Letter, Transfer of Responsibility etc. All such contacts are recorded as closed as at the date of dispatch.

1.4.2 Following a daily file transfer (which is an overnight process), the BSA team reconciles numbers of bills, letters and forms and sends all relevant items of stationery created the previous day through to DSTI for printing. These are signed-off, printed, enclosed and prepared for pick-up by TNT. Currently only bills, recovery notices and letters are handled this way. For DG6 reporting purposes the date of resolution of the item or date of the substantive response is used as the closure date.

2. Definitions

2.1 A billing contact covers any communication from a customer or their representative (on receipt of written permission from the customer as per data protection) regarding a customer account which requires a response or an action by NIW and does not constitute a written complaint. A customer's representative may be a solicitor, Citizens Advice Bureau, local MLA, or stakeholder representative, e.g. Ulster Farmers Union or CCNI.

2.2 Billing contacts can be received by telephone, in writing, by e-mail, by fax, by personal visit or written on a piece of company correspondence, for example a bill which is returned to NIW. Offensive or abusive written contacts are not included.

2.3 A billing contact not received in writing is a DG6 event. A written communication however, may be classified as a DG6 or DG7 event. Where the content or tone of written communication indicates an element of dissatisfaction, however mildly worded or unjustified, it should be classified as a written complaint and reported under DG7.

2.4 Billing contacts include calls that are made to pay a bill as this will result in an action being taken on the customers account.

2.5 We received clarification from both the Reporter and NIAR near the end of the reporting year that telephone complaints which relate to billing should be included as DG6 contacts. We are currently in discussion with Echo as to how this could be achieved for the next reporting year.

2.6 Email / Faxes: When an e-mailed, faxed or hand delivered contact is received after 16:30 it will be scanned, logged and indexed on the next working day. The date of receipt recorded will match the actual date of receipt.

3. Exclusions

3.1 A query relating to billing for domestic customers, including the provision of meters is not a DG6 contact, as domestic customers are not billed by NIW.

3.2 For reporting purposes, other exclusions are:

- Written complaints (these are handled as DG7);
- Correspondence from banks re direct debits (clarified with NIAUR as excludable);
- Contacts logged in error;
- Freedom of Information requests;
- Calls relating to septic tanks and septic tank payments (these are non appointed);

- Calls relating to new connections, not yet completed; and
- Copy correspondence from and to NIW personnel.

4. End of year (contacts not dealt with at end of year)

4.1 If a billing contact is not resolved by the time the year end report is run (and a holding response is issued in the subsequent year) it will be reported in the contacts received for the reporting year. It will not be included in the percentage calculation of the time taken to deal with contacts in the reporting year. The system is set up so that any item closed which has a holding response, is recorded as being closed on the date of the holding response. In this case (where a holding response was issued in the subsequent year) it will therefore be included in the percentage calculation for the time taken to close for the subsequent year.

5. Auditing

5.1 Internal Audits – This process falls within Echo's Quality Management system and is audited several times a year under ISO9001/2000.

5.2 Performance and the achievement of Billing enquiries are recorded as per the Contact Handling Expected Service Levels which are measured monthly in accordance with Contract Schedule 2.2. Detailed monthly monitoring reports of actual performance are generated by Echo from RapidXtra and presented in the monthly Business Review Pack (MBRP) to NIW within 5 working days of the end of each month covering lines 1.1.1 to 1.1.9 in accordance with schedule 8.4.

5.3 NIW validates DG6 performance information on a monthly basis, against the information provided by Echo in the contractual MBRP. Any discrepancies on monthly DG6 performance are raised with Echo and escalated. Validation of figures provided by Echo are carried out by NIW in accordance with *Contract Schedule 2.2* and recorded in the relevant CBC Performance Criteria Review Summary which is published for comment and review. At year end reports are validated and analysed at operational level.

5.4 Echo performs a regular quality review on contacts received to ensure contacts are dealt with correctly. Although no documentation is made available to NIW, regular reviews are carried out by Team Managers within Echo, including:

- Weekly call listening;
- Monthly scoring based on call listening and feedback to individual agents;
- Coaching and feedback; and

- Daily monitoring of all billing contacts with team feedback when necessary.

5.5 NIW conduct monthly bill accuracy checks and report their findings to Echo by randomly selecting 100 bills issued each month and analysing them for accuracy, including:

- Accuracy of standing charges, sewerage and water charges;
- Bill total agrees with supporting pages;
- Correct application of VAT;
- Customer details are correct; and
- Correct bill type is used.

Any discrepancies are logged and sent to Echo for review.

5.6 NIW conducted call listening monitoring on a monthly basis between April and September until the Triage process was introduced and resources were re-assigned. A random selection of calls were made and assessed:

- For accuracy;
- To determine if memo contents are clear and precise;
- To ensure the conversation is accurately recorded on Rapid; and
- To ensure correct use of CMS code.

Any findings were reported to Echo management.

5.7 An end to end process review is carried out by internal audit.

6. Sources of information

6.1 System used

6.1.1 The telephony system comprises of a suite of Avaya products and a CallMedia ACD. The Avaya switch is tightly integrated with the CallMedia platform which provides CTI (Computer telephony Integration) and ACD (Automatic Call Distribution). Calls can be automatically routed to appropriately skilled agents ensuring a quality response to the customer, at first point of contact. NICE is the call logging system.

6.1.2 The software comprises of CallMedia Enterprise Console with an integral reporting suite which distributes calls based on skills sets and SLA's.

6.1.3 Written correspondence is date stamped at point of receipt by Echo (unless received after 16:30), scanned on a (Kodak i 620 scanner) and indexed. This safeguards security and minimises administration. Once correspondence is scanned it is indexed and

batched with an allocated batch number. The scanned image is then available to Rapid Users.

6.1.4 All contacts received should be recorded on Rapid. Reports from Rapid are generated by Echo and are used to report on DG6 performance.

6.2 Changes in system during the report year

6.2.1 There have been no reported system changes agreed with NIW since the previous reporting period.

6.3 Actual data

6.3.1 Actual data is extracted from the billing system RapidXtra and used to report DG6 performance (table 4, lines 1-5). Rapid DG6 analysis is produced monthly and for the reporting year, providing the necessary information essential for the Director General's reporting requirements.

6.4 Sampling

6.4.1 Actual data is used to report DG6 performance (Table 4, lines 1-5). No sampling is used.

6.5 Reliability

6.5.1 All data is taken from the main billing system to ensure it is reliable and accurate.

7. Responses

7.1 This is defined as a response to a billing contact which may be by telephone, written correspondence or personal visit. Responses will provide the following:

- An explanation of NIW's relevant policy or procedure and indicates why, in NIW's opinion, no further action on the customers billing contact is required; or

- Informs the customer when action on his/her account will be taken if action cannot be taken immediately due to circumstances beyond NIW's control, for example customer needs to obtain clearance from third party, such as a landlord.

- Whichever type of response is dispatched it must substantively answer all points raised by the customer and be recorded and date stamped.

7.2 Use of telephone

7.2.1 The telephone is the company's preferred method of responding to a billing enquiry. All DG6 related telephone calls should result in a CMS memo being raised and coded by the agent according to the individual enquiry. An audit trail of the response will be recorded on the billing system (Rapid) as a memo with a CMS type. A full record of the actual conversation and its outcomes is held on CallMedia. A CMS is created on Rapid and contains information including:

- CMS type;
- Customer name;
- Customer address;
- Telephone contact;
- Query details; and
- Action required.

7.3 Use of letters

7.3.1 Letters are only used when it is not possible to deal with the customer by telephone, when a written reply has been requested by the customer and when it is deemed more appropriate by the agent. Telephone calls not dealt with at first point of contact are dealt with by the Echo Account Services department. A CMS is created on Rapid and contains information including:

- CMS type;
- Customer name;
- Customer address;
- Telephone contact;
- Query details; and
- Action required.

7.4.1 Holding letters are sometimes used but are customised by the agent. They are held within Rapid and are posted directly to the customer and not through DSTI.

7.4 Use of personal visit

7.4.1 If a DG6 contact requires a personal visit, (e.g. a meter query team site visit), the agent will raise a CMS contact. This will be transferred to the Account Services Department who take ownership for resolution and closure of the contact. The Account Services agent will send a holding letter to the customer once the visit request has been raised. It is this date/time of this letter that is used for closure.

7.5 Response time

7.5.1 This is the number of working days between receipt of a contact by NIW up to and including the day of despatch of a response. For the purpose of this calculation, the day of receipt; provided it is a working day; is counted as day zero and the next working day as day one.

7.5.2 Current guidance is for emails/faxes received on non-working days to be included in the calculation of response time. An email received on a Saturday should be counted as day zero. This does not currently happen and we plan to engage with ECHO and the Reporter this year to discuss this issue.

7.6 CCNI

7.6.1 Written billing contacts received via the Consumer Council for Northern Ireland (CCNI) office on a customer's behalf are being included.

7.7 Holding reply

7.7.1 This is defined as a response to a billing contact which advises the customer that NIW will need to undertake additional research or other actions before being able to respond to the customer's contact. A holding reply is counted as a substantive response if it informs the customer what further action needs to be taken to respond to the query and includes a date by which investigations or further actions will be complete and by when the customer will receive a further communication from NIW.

7.7.2 A substantive holding reply will close a contact for DG6 reporting purposes but not for NIW until all actions have been taken. Echo provides a reply no later than 15 days from contact (or 17 days if a personal visit is required). If there is no resolution, a further holding letter is sent. Enquiries and follow up questions will not be counted as a DG6 contact.

7.7.3 Where NIW is unable to provide the date by which investigations or further actions will be complete, the company will include the number of days in which the company will contact the customer again and the number of days after the contact that the substantive response will be sent to the customer.

8. Other Issues

8.1 Please refer to DG6 Company Commentary.

Northern Ireland Water

Level of Service Methodology

DG7 Response to Written Complaints

DG7 METHODOLOGY 2009/10

1. Methodology and Procedures

1.1. Northern Ireland Water (NIW) has contracted out the provision of Customer Billing and Contacts (CBC) to Echo Managed Services. Echo Managed Services (Echo) are the provider of CBC services to NIW.

1.2. DG7 response to written complaints (Process Summary)

1st April '09 – 23rd October '09

1. Documentation received (in Capital House);
2. Documentation opened by the Echo Customer Support Team;
3. Documentation scanned, logged & indexed;
4. CMS contact type raised and allocated;
5. Complaint allocated to Case Management Team;
6. Case Management Team investigate and case manage complaint;
7. Pass to relevant part of the business for investigation and resolution; and
8. Review information provided by field, update accounts, draft and issue response.

26th October '09 onwards

7. Documentation received (in Capital House);
8. Documentation opened by the Echo Customer Support Team;
9. Documentation scanned, logged & indexed;
10. CMS contact type raised and allocated;
11. Pass to NIW Triage Team for Assessment;
12. Triage Team confirm DG7 categorisation;
13. Allocate contacts requiring case management to Case Management Team;
14. Case Management Team investigate and case manage complaint;
15. Pass to relevant part of the business for investigation and resolution; and
16. Review information provided by field, update accounts, draft and issue response.

1.3. Allocation to DG7

1.3.1. Written complaints are recognised from all other correspondence by following the definition of a written complaint as set out in the Reporting Requirements and Definitions Manual 2010. All incoming written correspondence is received by the scanning and indexing team (Customer Support) and date stamped. It is then sorted and allocated to operational correspondence, payment notification, DG6 or DG7 according to the Utility Regulator's definitions.

1.3.2. The reported response times for all written complaints are derived from the Rapid database. All complaints with the exceptions of exclusions detailed in section 3.1 are included in this total.

2. Definitions

2.1. A DG7 complaint is defined as any written communication from a customer or customers' representative (e.g. Citizens' Advice Bureau, solicitor), alleging action or inaction, or service or lack of a service on the company's part or that of its agent or contractor has fallen below the expectation of the customer – even if written in mild and friendly terms. This includes any expression of annoyance or dissatisfaction by the customer, or disagreement with the company.

2.2. Written complaints include:

- Letters, faxes and electronic mail.
- Second or subsequent complaints are included.
- General complaints are included.
- Complaints that may seem unfair or frivolous are also recorded.
- Complaints received by Consumer Council for Northern Ireland are also included in these figures.
- Complaints written on returned Company letters or stationery (e.g. bills) are included.
- Should the Company receive a petition, it is classed as a DG7 and the Company will respond only to the customer who has sent in the petition. This will be classed as one complaint although the complaint and the response letter will be archived against the account of each customer that has signed the petition where practical.

2.3. Email/Faxes: When an e-mailed, faxed or hand delivered contact is received after 16:30 it will be scanned, logged and indexed on the next working day. The date of receipt recorded will match the actual date of receipt.

3. Exclusions

3.1. The following are excluded for DG7:

- Cheques and stubs;
- Written DG6 Billing queries;
- All other Company mail;
- Complaints that are sent anonymously;
- Complaints that are offensive or abusive;
- Complaints referring to non-appointed activities;
- Complaints returned alongside customer satisfaction surveys;
- Complaints not about the services and functions of the Company (e.g. complaints about executive salaries, advertising campaigns);

- Complaints about the activities of other utilities (for example signage around trenches);
- Complaints about recreational and amenity activities not defined as duties imposed by the Water and Sewerage Order 2006; and
- Public liability claims (although any related complaint should be included as normal).

3.2. End of Year

3.2.1. If a complaint is not resolved by the time the year end report is run (1 May 09) but a substantive holding response is issued in the subsequent year then it will be reported in the complaints received figure line 1 for the reporting year, but it will not be included the calculation of the % of time taken to resolve figure line 2-5 in the reporting year. Once the item is resolved and closed the system is set up so that any item closed which has a substantive holding response, is recorded as being closed on the date of the substantive holding response, which in this case is the subsequent year. It will therefore be included in the subsequent year's figures for time taken to close.

3.2.2. If a complaint is not resolved by the time the year end report is run (24 April) but a substantive holding response has been issued in the reporting year, then it will be reported in the complaints received figure (line 1) for the reporting year but it will not be included in the calculation of the % of complaints resolved time figure line 2-5. Once the item has been closed during the subsequent year it will be closed to a date in the reporting year gone so will not be included in the subsequent year's figures.

3.2.3. The number of complaints which will appear in neither years report for time taken to closed is calculated by assessing the volume of written DG7's that were received in year 2009/10, remained open on 24 April 2010 but will be closed back to a substantive holding response date in 2009/10.

3.2.4. We print the DG7 reports generated on 24 April 2010.

4. Auditing

4.1. Internal audits

4.1.1. This process falls within the Echo Quality Management System which is audited several times a year under ISO9001/2000.

4.1.2. In addition each response undergoes Quality Assurance checks before issue.

- The first is carried out by the agent who has the item allocated to them. They check that the item has been correctly:
  - Categorised to DG7.
  - Coded.
  - Scanned to the correct account.

- Since 26th October '09, the Triage Team verify the DG7 categorisation.
- Since 26th October '09 the Triage Team verifies that the information received from within the business is suitable to use in response to the complaint, before the response is drafted.
- Once the response has been drafted it is subject to a Quality Assurance Process during which adherence to an agreed Letter Writing Checklist and process is followed.
- From 1st April 2009 – 23rd October, for each calendar month a quality check of 30 randomly selected complaints was carried out by NIW. This was a check against an agreed criteria.
- From 1st April 2009 – 23rd October every tier 2 complaint, CEO and Director complaint was quality checked by NIW escalation team.

4.1.3. Monthly Business review pack. Any discrepancies on monthly DG7 performance are raised with Echo and escalated.

5. Sources of Information

5.1. Complaints are date stamped at point of receipt by Account Services, sorted into the relevant categories, scanned then indexed, thus ensuring security and minimising administration.

5.1.1. Each complaint received is scanned using the Kodak i620 scanner. At the end of each "batch" of correspondence scanned, a batch number is allocated. The images can then be seen by staff on their PC and indexing can begin. During indexing the following details are input by the operator:
- Property and/or customer reference.
- Date.
- Description.
- Document type.
- Name of operator indexing correspondence.

5.1.2. It is at the indexing stage that the scanned items are categorised, thus allowing the description to be input above.

5.2. System Changes

5.2.1. There have been no system changes from the previous reporting period agreed by NIW.

5.3. Actual Data

5.3.1. Management reports are produced from the Rapid system, including a daily hit-list which identifies by section any item of correspondence outstanding.

5.3.2. Rapid DG7 analysis is produced monthly, and for the reporting year and provides the necessary information essential for the Director General's reporting requirements.

5.3.3. Written complaints for the year 2008/09 have been monitored, controlled and responded to by our Customer Relations Centre operated by Echo.

5.4. Sampling

5.4.1. Sampling is not used in compiling data for DG7.

5.5. Reliability

5.5.1. All data is taken from the main billing system to ensure that it is reliable and accurate.

6. Responses

6.1. Upon receipt of a complaint, we ensure that relevant action is undertaken, provide a substantive response and ensure the correspondence is closed on the system.

6.2. The Company endeavours to answer all correspondence, regardless of the sensitivity of the issue or subject raised by the customer. Our responses do one or more of the following:

6.2.1. Provide an explanation of our policy or procedure and indicate why no further action is required.

6.2.2. Informs the customer that action to resolve the complaint has been taken and identifies when this action occurred.

6.2.3. Informs the customer when the action to resolve his/her complaint will be taken if it cannot be done immediately e.g. capital works scheduled for month and year and will be completed month and year.

6.2.4. Every response answers all issues or questions raised by the customer.

6.3. Use of Telephone

6.3.1. Where appropriate telephone calls are used to respond to written complaints. Telephone calls are also used to update customers as the progress of complaints under investigation. The customer account is annotated with details of the call in these cases. Complaints closed to telephone calls also receive written confirmation.

6.4. Use of Standard Letters

6.4.1. Standard letters are not used to respond to complaints, all responses are personalised and customised.

6.5. Use of Personal Visit

6.5.1. When a personal visit is used to respond to a written complaint a letter confirming the content of the visit is provided to the customer. The date of the visit is used as the date of response.

7. Assumptions

7.1. NI Direct

7.1.1. Complaints received through NI direct are not reported.

7.2. Telephone Complaints

7.2.1. Complaints received via telephone are recorded under DG9 telephone complaints not DG7.

7.3. Date of Receipt

7.3.1. Complaints are date stamped at point of receipt and this is used as date of receipt to NIW

7.4. Date of Dispatch

7.4.1. The date of despatch refers to the date a response is sent to the customer.
7.4.2. The date of despatch is recorded as the date closed.

7.5. Response Time

7.5.1. This is the number of working days between receipt of a written complaint by NIW up to and including the date of despatch of the

response. The date received provided it is a working date is considered day zero and the next working day is day one. Current guidance is for emails/faxes received on non-working days to be included in response time e.g. Email received on Saturday should be counted as day zero. This does not happen currently and we plan to engage with ECHO and the Reporter this year to discuss this issue.

7.6. Substantive Holding Reply

7.6.1. This is a response to a written complaint which advises the customer that NIW need to undertake additional investigations or other actions before being able to provide a full response. A holding response is considered substantive if it advises the customer what further action needs to be taken in order to fully respond, when this will be done and when they will receive a further communication.

7.6.2. Items remain open until all actions have been completed but will be closed back to the date of the holding response for reporting purposes when said actions have been completed.

7.6.3. When a date by which investigations or further actions will be complete cannot be given we will give the date by which we will contact the customer again.

7.7. Repeat Contact

7.7.1. Where a complaint has been responded to and results in a period of correspondence each letter is treated as and reported as a separate complaint.

7.7.2. This is done even if the NIW consider the complaint has been dealt with as far as we are able.

7.8. CCNI

7.8.1. Complaints received in writing via CCNI will be logged as complaints and recorded in DG7 figures.

7.8.1.1. CCNI Enquiries and follow up questions will not be recorded as complaints.

7.9. Complaints to or about Contractors

7.9.1. Complaints made directly to contractors about work carried out on our behalf will only be recorded if NIW are notified. If NIW are notified it will be recorded even it is handled directly be the contractor.

7.9.2. Complaints about contractors received by NIW are reported even if they are referred to the contractor to deal with.

Northern Ireland Water

Level of Service Methodology

DG8 Bills for Metered Customers

DG8 - BILLS FOR METERED CUSTOMERS

1. Definitions

1.1 Every time a metered account is billed a reading type is updated onto the billing system (Rapid) to identify the type of reading.

1.2 The reading types and estimated indicator are used to distinguish the meter reading status of each metered account analysed in the DG8 report.

1.3 The Rapid DG8 analysis report ensures we correctly identify each of the reporting requirements in the sequence shown.

2. Total Metered Accounts

2.1 The report confirms the number of accounts which either water or water and sewerage consumption is calculated.

3. Company Reading and Billed

3.1 If a Company reading has been taken during the current financial year and a bill raised against that reading it will be included under the 'Meters read by Company' indicator. The exception to this is those meters that are billed outside of Rapid. (trade effluent meters)

4. No Bills Received During Reporting Year

4.1 Bill status is scanned for no bills issued during the reporting year and is reported under the 'Not Billed this year' indicator.

4.2 Meters included in this category are identified as having a reading entered but the 'bill sent' flag set to 'No'

5. Customer Readings

5.1 Reading types are scanned for not receiving a bill based on a Company Reading but at least one bill based on a 'Customer Reading' and will be included in the 'Meters read by Customers' indicator.

5.2 'Meters Read By Customer' represents the number and percentage of the meters read by the customer within the DG reporting year that are identified as either 'Customer read' or 'Customer web reading'

6. Estimated Only

6.1 Any meters that have not satisfied any of the preceding indicators will be recorded under the 'Meters Estimated Only' indicator.

6.2 'Meters Estimated Only' represents the number and percentage of meters only estimated within the DG reporting year. The following read types are identified as estimates: Estimate Exchange Final, System Estimate, and Manual Estimate.

7. Unread for Two Years

7.1 If no Company reading exists during a two year period, it will be reported under the 'No Company Reading for 2 Years' indicator.

7.2 Specifically two years back from the end date of the DG report.

8. Exclusions

8.1 The following are excluded from the indicators:
- 8.1.1. Charged on another basis (not metered consumption).
- 8.1.2. Test meters.
- 8.1.3. Trade-effluent meters.
- 8.1.4. DRD or NIW meters.
- 8.1.5. Fire supplies.
- 8.1.6. Properties occupied less than six months.
- 8.1.7. Complex accounts – Including combination meters.
- 8.1.8. Void properties.

9. Billing Policy

9.1 Frequency of Bill Issue :
- 9.1.1. Household properties – the Company do not currently bill domestic properties.
- 9.1.2. Non-household – the Company aim to read at twice a year and bill twice yearly.
- 9.1.3. Large non-household users – the Company aim to read and bill monthly.

10. Customer Reads

10.1 The Company encourages our customers to take readings themselves so that they are aware of their usage. Customer reads can be registered for billing purposes by using the On-line facility available on our website or by calling our billing line.

11. Data Collection

11.1 Frequency of reading:
- 11.1.1. Non-household properties are scheduled to be read twice a year. The reading schedule for the 1st read is completed over a six month period.
- 11.1.2. Non-household – large volume users are read and billed monthly.

12. Method of Meter Reading

12.1 Details of metered accounts scheduled for reading are transferred to an electronic data storage unit (PDA), which is subsequently updated upon the meter being read. The information obtained is then transferred back to the Rapid billing database.

13. Policies

13.1 Access Denied / Meter Reading Unobtainable

13.1.1. In such instances that the Company is unable to gain access to the meter, a skip code is entered which identifies that access was denied. If the customer does not provide a reading before the billing run a system estimate is used.

13.2 Faulty Meters

13.2.1. Where a faulty meter is identified, the Meter Reader will replace it dependent on the type of meter installed. Details of both the old and new meter will be recorded on a meter replacement docket and passed to the meter account management section to amend the account.

13.2.2. When the Meter Reader cannot replace the meter our maintenance contractor will change it. The request is passed to the meter maintenance section by the meter reader. When the meter has been replaced the contractor advises the meter reader of the replacement details. The old and new meter details will then by returned by the meter reader on a meter replacement docket for updating on the billing system.

13.3 Abnormal Readings

13.3.1. An abnormal reading can be identified by one of two factors:

13.3.1.1. A meter reading that gives a usage that does not fall in line with previous usage patterns, identified by the Meter Reader, billing system or customer.

13.3.1.2. A meter reading that does not correlate with previous readings taken.

13.3.2. The PDA unit automatically calculates the usage between a new reading and the previous reading. The Reader checks the usage against the previous readings that are displayed on the PDA. If the usage appears to be abnormal, the Reader will enter a report onto the PDA and or use a pre set indicator to explain why (trouble codes).

13.3.3. A daily ‘Rejected Readings’ report is produced through the Rapid billing system that also identifies any abnormal usage that require further investigation. Each account on the report is checked and if accepted the reading will be utilised and a bill

issued. If not, the Reader will be required to revisit the meter to obtain another reading and any other details that would justify the abnormal usage. Customer readings that also fall into the abnormal usage trend are similarly visited to confirm the usage.

13.4 **Previous Misreads**

13.4.1. Accounts that are identified as having previously been misread are subject to re-calculation based on the most recent meter reading.

13.5 **Data Transfer**

13.5.1. **Company Reads**

13.5.1.1. Before the start of each reading period, whether monthly or six monthly, all accounts, relating to the specific period, are transferred from the Rapid system onto Routestar. The accounts are then downloaded onto the PDAs for the actual reading of the accounts. Each day the Reader will upload the PDA and those accounts that have had a reading and or an abnormal reading indicator inserted are transferred to Rapid.

13.5.1.2. The data transfer from the Routestar to Rapid is not solely automatic and currently requires manual assistance.

13.6 **Customer Reads**

13.6.1. Customer readings are recorded via a correspondence management system. A team member will then update the account and issue a revised bill. A customer reading type indicator will be displayed on the system. The estimated read will also be visible on the system.

14. Updating, Post Bill Issue

14.1 If the Company has any disputed readings, the account will be suspended while further investigations are being made. Once the investigations are finalised, a revised bill will be issued if necessary.

15. Data Measurement

15.1 The Rapid billing system is used to provide the reported information.

15.2 A new connection job closure ellipse report is generated every week to confirm property details. This information is passed to our meter installation contractor by secure FTP. The contractor installs the meter and provides a data file weekly with the meter details including the first read. Once this information is provided it is automatically uploaded into

Rapid. The accounts are then included as part of the scheduled reading pattern. Data provided by the contractor is used to cross check this data.

16. Procedures

16.1 The data for DG8 reporting requirements is compiled by the Rapid billing system as the 'DG8 analysis' report. This report is based on meter numbers.

16.2 The report is run annually at the end of the financial year, covering the period 1 April to 31 March and includes all categories requested by the Director General for the June Return reporting.

16.3 A bill is only counted as issued if it is sent to the customer within the reporting year. Any that are sent after this date will be included in the following reporting years figures.

17. Sources of Information

17.1 The reading indicators are extracted from Rapid RPU005 meter consumption update screen. The DG8 analysis report extracts this information and compiles this in line with the requirements.

18. Assumptions

18.1 Those accounts excluded from the analysis are categorised using the definitions provided by the reporting requirements.

19. Other Issues

19.1 Echo, on behalf of Northern Ireland Water, are responsible for the billing activity.

19.2 Some meters are billed on a sundry schedule rather than the normal billing schedule within Rapid. These are Trade Effluent bills. Trade Effluent bills are excluded from DG8.

19.3 Sewerage only customers if not TE customers are charged on an unmeasured basis.

Northern Ireland Water

Level of Service Methodology

DG9 Telephone Contact

Contents

DG9 Telephone Contact

2 Definitions

2.1 Principle Advertised Customer Contact (PACC) Points

For the purposes of the indicator, principal means the main contact point(s) which customers are encouraged/directed to phone to, while advertised refers to those customer contact points which appear in telephone directories, newspaper advertisements, on the Northern Ireland Water (NIW) website, NIW literature or are specifically printed (rather than typed) onto NIW letterheads. It excludes however, those which are of a temporary nature established to handle a specific topic.

NIW principle advertised customer contact points include:

- **Billing Enquiries:** 0845 877 0030
- **Waterline:** 0845 744 0088 (Customers telephoning Waterline are asked to press one for new water connections or hold for all other enquires).
- **Leakline:** 0800 028 2011
- **Text Phone** (for customers with hearing difficulties): 0800 0515 446
- **Debtline (Collections & Recovery Department):** 0845 8770 050

In addition, an MLA hotline (0845 300 6461) was initiated on 21st August 2007 to provide a direct means of contact for elected representatives and council members telephoning to enquire about specific issues in their constituencies.

2.2 Company Agent

Northern Ireland Water (NIW) has contracted out the provision of Customer Billing and Contacts (CBC) to a consortium organisation known as Echo Managed Services (Echo). Echo is the provider of CBC services and is based in Capital House, Belfast.

A company agent is defined as an employee of Echo (operating from a principle customer contact point), who operate the contact on behalf of NIW. All calls are answered directly by Customer Service Advisors who are direct employees of Echo consortium members.

2.3 Office Hours

The indicator covers office hours only. Office hours are defined as the hours which NIW's principal advertised customer telephone contact points are open. These are detailed below:

- **Billing Enquiries:** Monday to Friday - 08.00 to 20.00

Saturday - 08.00 to 18.00
Sunday - 12.00 to 18.00

- **Waterline:** 24 hours a day, 7 days a week, 365 days a year
- **Leakline:** 24 hours a day, 7 days a week, 365 days a year
- **Text Phone:** 24 hours a day, 7 days a week, 365 days a year
- **Debtline:** Monday to Friday - 08.00 to 17.00
- **MLA:** 24 hours a day, 7 days a week, 365 days a year

A reduced service is available on the following main public holidays: Christmas Day, Boxing Day, New Years Day, Easter Sunday, 12th and 13th July.

2.4 Table 5, Lines 13-17

Total Calls Received on Customer Contact Lines

2.4.1.1 This is defined as the number of calls that are received (including those which are later abandoned) on principle advertised customer contact points and make contact with a company agent or hear a recorded message that is not an all lines busy message.

2.4.1.2 Calls which receive an engaged tone or hear an all lines busy message are not counted as calls received, such calls are collected within the 'all lines busy' aspect of the indicator.

All Lines Busy

2.4.1.3 The 'all lines busy' category measures the degree of difficulty customers experience in being able to connect with a company agent or automated system. All calls receiving an engaged tone or hearing an all lines busy message are reported. This also includes calls where a customer hears the engaged tone as a result of a problem with the line where the call has been received via Call Master (Call Master is a Cable and Wireless tool used to report on the activity of the ACD/switch. This is the stage before Call Media as this is the only point at which All Lines Busy can be monitored/reported on).

Total Calls Abandoned

2.4.1.4 The 'calls abandoned' category aims to capture the total number of callers who abandon their call before it is substantively answered by NIW. All calls abandoned, including those abandoned within 30 seconds are reported.

Call Handling Satisfaction

2.4.1.5 Call handling satisfaction aims to measure customers' satisfaction with the way NIW handles their telephone call. This is an annual score produced by four waves of customer satisfaction surveys conducted by McCallum

Layton on behalf of OFWAT and Water UK. The results from asking "overall, how satisfied were you with the manner in which your call was handled" are used for the call handling satisfaction score.

Total Telephone Complaints

2.4.1.6 Please see below a list of issues categorised via CMS type. These include billing, water service and wastewater issues. As a general policy, NIW records all telephone calls about these issues as complaints:

- Orig CMS Type
- Appearance-Animalcules
- Appearance-Discoloured (Blue/green)
- Appearance-Discoloured (Brown/black/orange)
- Appearance-General Conditions
- Appearance-Hardness
- Appearance-Particles
- Appearance-Stained Washing
- Appearance-White-Air
- Appearance-White-Chalk
- Bad Smell Treatment Wks/pumping Stn
- Bl- Debit Error Overcharge
- Bl- Disconnection Without Just Cause
- Bl- Disputed Liability For Measured Bill
- Bl-A V R No Response To Message Left
- Bl-Account Closed In Error
- Bl-Bill Arising From Disputed Meter Read
- Bl-Bill/final Notice Not Received
- Bl-Debit Error
- Bl-Delay In Changing Acc To Measured
- Bl-Delay In Issuing Bill
- Bl-Delay In Issuing Refund
- Bl-Disconnection Without Just Cause-Comm
- Bl-Disputed Liability For Unmeas Bill
- Bl-Error In Previous Response
- Bl-Fixed Charge Incorrect
- Bl-Incorrect Account Details
- Bl-Increase In Charges
- Bl-Lack Of Information To Customers
- Bl-Late Response
- Bl-Leak Allowance
- Bl-Liability For Charges
- Bl-Measured Billing Error - Overcharge
- Bl-Meter Reading Frequency
- Bl-Method Of Payment
- Bl-Methods Of Billing For Measured Cust
- Bl-Methods Of Billing For Unmeas Cust
- Bl-No Reply To Original Contact

- Blocked Sewer Inc Cleanup & Disinfect
- Bl-Original Contact Not Received
- Bl-Other Charging Methods
- Bl-Payment Not Allocated To Correct Acc
- Bl-Poor Information On Bill
- Bl-Promised Action Not Completed
- Bl-Reply Crossed In Post
- Bl-Sending Of Estimated Accounts
- Bl-Standing Charges
- Bl-Timing Of Reminders
- Boil Notice
- Cs-Error In Previous Response Any
- Cs-Late Response All
- Cs-No Reply To Original Contact C S
- Cs-Original Contact Not Received C S
- Cs-Promised Action Not Completed All
- Dangerous Opening (W)
- Dangerous Openings (S)
- Defective Surface Covers (S)
- Defective Surface Covers (W)
- Driving/vehicles
- Faulty Stopcock
- Flooding External (S)
- Flooding Internal (S)
- General Complaint
- High Consumption
- High Water Pressure
- Illness-Medical Opinion
- Illness-Oral
- Illness-Sick/diarrhoea/gastro/crypto
- Illness-Skin
- Key Account Issue
- Leakage
- Le-Error In Previous Response
- Le-Late Response
- Le-Promised Action Not Completed
- Low Water Pressure
- Me Access/maintenance/replacement
- Me Accuracy And Testing
- Me Meter Reader Behaviour
- Me Metering Of Existing Properties
- Me Optional Metering - Other
- Me Other Meter Problem
- Me Quality Of Meter Installation By NIW
- Me Time Taken To Install Meter By Company
- Me-Customer Meter Fault Report
- Missing Payment

- Nc NIW No Show
- No Approval Letter Received
- No Sewer Available
- No Water Complaint
- Noise In Pipes
- Ot - Attitude/behaviour Of Staff
- Ot - Contractor Activity
- Ot - Contractor Attitude
- Ot - Customer Service Behaviour
- Ot - Driving Vehicles
- Ot Error In Previous Response
- Ot Inadequate Notice Given By Company
- Ot Late Response
- Ot Operations Behaviour
- Ot Poor Advice From Company
- Ot Promised Action Not Completed
- Other For Water Service
- Ot-Reminder Notice
- Pollution (Sewerage)
- Rehabilitation Contract
- Reinstatement
- Report A Fault
- Rr-Debt Recovery Procedure
- Rr-Late Response
- Rr-Legal
- Rr-No Reply To Original Contact
- Rrpromised Action Not Completed
- Rr-Timing Of Reminders
- Rr-Wording Of Final Notice
- Run Of Water (W)
- Site Complaint
- Site Complaint - Sewerage
- St Septic Tank Damage Caused By Contract
- Sw Bad Smell Treatment Works/pump Station
- Sw Damage & Disruption During Construct
- Sw Delay In Repair To Sewers/drains
- Sw Flooding Internal & External
- Sw New Sewers Conns
- Sw Other Sewerage Service Problem
- Sw Pollution - River
- Sw-Bad Smell Stw/sps
- Sw-Blocked Sewer
- Sw-Dangerous Openings
- Sw-Flooding External (S)
- Sw-Fractured/collapsed Sewer Pipe
- Sw-Late Response All
- Sw-Reinstatement (S)

- Sw-Run Of Water (Sewerage)
- Sw-Site Complaint
- Sw-Sps Fault
- Taste & Odour-Chlorine
- Taste & Odour-Earthy/musty
- Taste & Odour-Other Taste/odour
- Taste & Odour-Petrol/diesel
- Taste & Odour-Tcp
- Trade Effluent
- Water Flowing Over Land
- Water Flowing Over Road
- Water Quality(Cust Concern)-Incid Rel-Gener
- Water Quality(Cust Concern)-Campaigns
- Water Quality(Cust Concern)-Incident Rel
- Water Quality(Cust Concern)-Life Style
- Water Quality(Cust Concern)-Pets/animals
- Water Quality(Cust Concern)-Sample
- Water Quality(No Concern)-Fluoride
- Water Quality(No Concern)-Other Info
- Water Quality(No Concern)-Water Hardness
- Water Quality(No Concern)-Water Qual Rep
- Ww Contractor Attitude
- Ww Damage & Disruption During Construct
- Ww High Pressure/pressure Surge
- Ww Interruption - Incident Related
- Ww Leakage - Fail/delay In Repair Main
- Ww Low Pressure - Daily Problem
- Ww Low Pressure - Intermittent Occurrence
- Ww No Water
- Ww No Water>24hrs
- Ww Other Pressure Problem
- Ww Other-Relating To Main/pipes
- Ww Site Complaint -Water
- Ww-Appearance-Discol(Brown/black/orange)
- Ww-Appearance-White Chalk
- Ww-Contractor
- Ww-Flooding (W)
- Ww-Late Response All
- Ww-No Water
- Ww-Promised Action Not Completed
- Ww-Site Complaint
- Ww-Taste & Odour (Other Taste & Odour)
- Ww-Water Pressure
- Ww-Water Qual (Cust Concern) Campaign

2.4.1.7 **CCNI:** As a general policy, all correspondence from CCNI is received via email. These are recorded as Enquiry, Stage 1, Stage 2 and Follow up.

2.4.1.8 **Complaints to/about contractors:** Telephone complaints to contractors or other agents about work being undertaken on behalf of NIW are reported only where NIW are informed. Complaints about contractors or other agents are also reported, even if the complaint is referred to the contractor to resolve.

2.5 Exclusions

Telephone Contact: The indicator is intended to monitor incoming telephone traffic which can be regarded as originating from NIW's customer base. All calls received to telephone lines other than principle advertised customer contact points are excluded for reporting purposes (i.e. all other business lines).

Telephone Complaints: NIW excludes from the reported figures, those telephone complaints which are:

- anonymous;
- about the activities of other utilities;
- received through NI Direct Incident Line; and
- received on telephone lines other than principle advertised customer contact points (i.e. all other business lines).

3 Call Receipt / Telephony Structure

3.1 Telephone Providers Network

The supplier during the reporting year was Cable & Wireless.

3.2 Within Company Systems: Call Media

All calls delivered to the Call Media system are delivered to an appropriately skilled agent. If there is more than one Customer Service Agent available, the system allocates the call to the one who has been available the longest period of time.

If no skilled agent is available immediately then the call will be queued until a skilled agent becomes available. The Call Media Telephony System provides an internal queuing system where callers will hear a ring tone and then a comfort message and music on hold.

The use of Call Media's skill based routing ensures that incoming calls are distributed in a way that will ensure a quality response to the customer.

3.3 Call Recording

All calls received in the call centre via Call Media are recorded via NICE call recording software. This software records the time of the call and the telephone number that called the centre if available.

3.4 Reporting/Validation

All calls are recorded within Call Media (the telephony system) including their status i.e. answered or abandoned. This is used in conjunction with the providers' network to determine calls answered, calls answered within 30 seconds, % calls abandoned and % lines not busy to understand full DG9 position.

DG9 performance is reported internally on a daily, weekly and monthly basis. Daily/weekly scorecards showing DG9 performance, including year to date performance are reported by Echo. A detailed monthly Business Review Pack is also presented to NIW within 5 working days of the end of each month.

NIW Contract Office run independent Call Media reports (covering monthly and reporting year) and Rapid reports (for telephone complaints) and reconcile against those provided by Echo.

NIW previously carried out monthly quality assurance checks (minimum of 2 hours a month) on random calls up to November 09. Call results are discussed with Echo and an overall score is reported back to both Echo and NIW Contract Office. Calls are scored based on three categories:

1) Opening and Salutation
2) Skills and Knowledge
3) Soft Skills.

These are due to recommence June 2010.

Please see below for a full list of the checks carried out under each category:

Opening/Salutation
Correct opening/salutation
You are speaking to/my name is
Customer account number requested
1st line of address confirmed
If 3rd party - check permission / DP adhered to
Full name requested / updated
Postcode Updated
Contact tel number requested / confirmed
Reason for call identified
Skills and Knowledge
Correct advice given to the Customer
Correct procedure / policy quoted
Check customer in charge on RAPID & paying
RAPID updated correctly
Correct timescales stated

Call transferred correctly
Correct CMS code selected
Call Logged
Correct job raised
Call back actioned
Agent's notes satisfactory
Soft Skills
Appropriate language / Questioning used
Listening noises
Avoided interrupting the Customer
Courteous telephone manner
Advisor sounded interested
Initiative used to resolve enquiry / complaint
Willingness to help shown
Confidence and Competence shown
Advisor controlled the call
Summary of actions given to the Customer
Correct closing statement

4 Call Handling

4.1 Practices and Procedures

All calls received are managed by Call Media and routed directly to an appropriately skilled company agent based on the first available call handler.

Wherever possible, an agent will deal and action a customers enquiry at point of contact. Where this is not possible, a message will be raised on the system for further investigation or where appropriate the customer will be transferred. The majority of agents are multi-skilled, so this is the exception rather than the rule.

When a call is handled, this is recorded on Call Media including wait time, call duration etc.

All enquires are logged on RapidXtra, the Customer Billing and Contact Management System by the company agent, covering the reason for the contact (contact type) and the advice given or action taken. This is the case whether or not further work is required ensuring all calls are recorded, even if they remain open for further action.

Calls which require further action are logged on RapidXtra and work flowed to teams or individuals as required via the RapidXtra Workflow Module. This includes instances where further ‘back office’ or NIW investigation is required in order to provide a response to the customer.

Inbox hit lists in RapidXtra are used to give real time visibility of cases outstanding including the date that the contact was received, the number of days the contact has been open, the contact type and references relating to the customer and the contact itself.

4.2 Transfers between Principle Advertised Customer Contact Points (PACC)

Agents are multi-skilled, so transfers are not generally made. Transferred calls are reported as one call.

4.3 Direct Measurement/Interpolation/Extrapolation

NIW measures statistics for all telephone calls received on 'Principle Advertised Customer Contact lines' which are delivered directly to the Call Media telephony system. Sampling, interpolation or extrapolation is not used in compiling totals.

An integral component of the Call Media system is the reporting module containing various standard reports detailing queue activity, including:

- Calls offered to a queue
- Calls answered on a queue
- Calls abandoned on a queue

5 Messaging

5.1 Use and activation of IVRs (Interactive Voice Response)

Interactive Voice Response (IVR) was not used by NIW during the reporting year. A recorded introductory message however was set up and assigned to each queue, i.e. Billing Enquires Line. The message greets the customer and thanks them for calling the relevant queue. It explains that an agent with be with them shortly and to note that calls are recorded to help provide quality assurance and training.

For Waterline, customers hear an additional message, "press one for new water connections, or for all other enquires please continue to hold".

If a customer telephones out of hours, the customer will receive an out of hour's message.

In the event of disaster recovery and building evacuation, a recorded message is activated which explains to customers that calls can not be answered at the moment, please call back later.

Where an incident has been declared, NIW may authorize the use of a recorded message to intercept and answer customer calls from the area(s) affected by the incident.

5.2 Use and activation of message manager systems

No message manager systems were used during the reporting year.

5.3 Use and activation of answering machines

Answering machines were not used during the reporting year.

5.4 Use and activation of touchtone systems

Other than recorded messages and the option customers hear when they contact Waterline "press one for new water connections, or for all other enquires please continue to hold", no touchtone systems were used during the reporting year.

6 Company Systems

6.1 Telephony

Systems comprise of a suite of Avaya products and a Call Media ACD. The Avaya switch is tightly integrated with the Call Media platform which provides Computer Telephony Integration (CTI), Automatic Call Distribution (ACD) and outbound dialler functionality through three main components:

- Avaya S8710 providing core telephony switching
- Call Media Contact Centre software providing ACD, CTI and dialler functionality
- NICE Call Recording

Calls that arrive at the Avaya switch are routed by the Call Media ACD to appropriately skilled agents via desktop phones.

6.2 Location

All systems are located at Capital House, Belfast. There is currently a 210 line capacity dedicated to NIW customers. This line capacity has proved more than sufficient to date with no incidences of this requirement being reached or exceeded. The scale of the current capacity was implemented in preparation for domestic billing which was deferred in April 2007.

6.3 Software

Software comprises of Call Media Enterprise Console, the integral reporting suite supplied with Callmedia ACD and NICE call recoding.

Appendix 1 illustrates the telephony infrastructure and shows how the telephony components integrate with the overall operation. Please note however that not all components have been enabled during the reporting year (i.e. customer self service voice – speech enabled).

7 Other Issues

7.1 Abandoned Calls

During the reporting year, NIW was unable to differentiate between calls abandoned within 10 seconds and over 10 seconds. During the

reporting year NIW reported total calls abandoned within 30 seconds and over 30 seconds.

7.2 NIW Switchboard

During the reporting year the telephone number for NIW switchboard was displayed in small type at the very bottom of the company website (see below). This is a business line and should not be advertised to NIW customer base. Calls to this business line have not been included in total calls received. This telephone number has since been removed from NIW website. Any calls received from customers on this business line would have been referred to the appropriate customer contact line and captured via Call Media.

Northern Ireland Water Limited, Registered Office, Northland House, 3 Frederick Street, Belfast, BT1 2NR.
Registered Number :NI054463
Tel: +44 (0) 2890 244 711| Fax: +44 (0) 2890 354 798

7.3 Type Talk and Text Phone

NIW has provided for a standalone Textphone service for use only by customers who have their own textphone. This service is provided for customers with hearing difficulties.

Type Talk is a third-party service whereby the customer rings a Type Talk operator, who in turn contacts the Customer Relations Centre via the normal customer line (Waterline/Leakline/Billing, etc) on behalf of the customer. This is recorded as a call received on the appropriate line.

During the reporting year NIW advertised a Type Talk service on the company website (0800 0515 446), this is a misprint and actually refers to the Textphone service offered to customers with hearing difficulties.

Following a quality check conducted by NIW, a call using a textphone to this number was not answered. After investigation it was identified that the Textphone service has not been operational during the reporting year, having only been operational from May 2009. Calls received on this line during the reporting year can not be reported and this service failure is currently under investigation.

7.4 Rejected Calls

NIW is currently investigating the number of rejected calls reported in Call Media reports across principle advertised customer contact points. Calls are currently rejected for any of the following reasons:

- The time being out of working hours
- There being no users currently logged on with the skill to handle the task

- The queue is too full and cannot accept any more tasks. Each queue holds 500 calls at any one time.
- The task queued for the 'Max Queue Time' and was returned to the connector.

NIW is investigating if it is appropriate to 'reject' calls based on these reasons.

During the reported year, Call Media rejected 4,287 calls across all principle advertised customer contact points. These figures are not included in total calls received. A breakdown is available below:

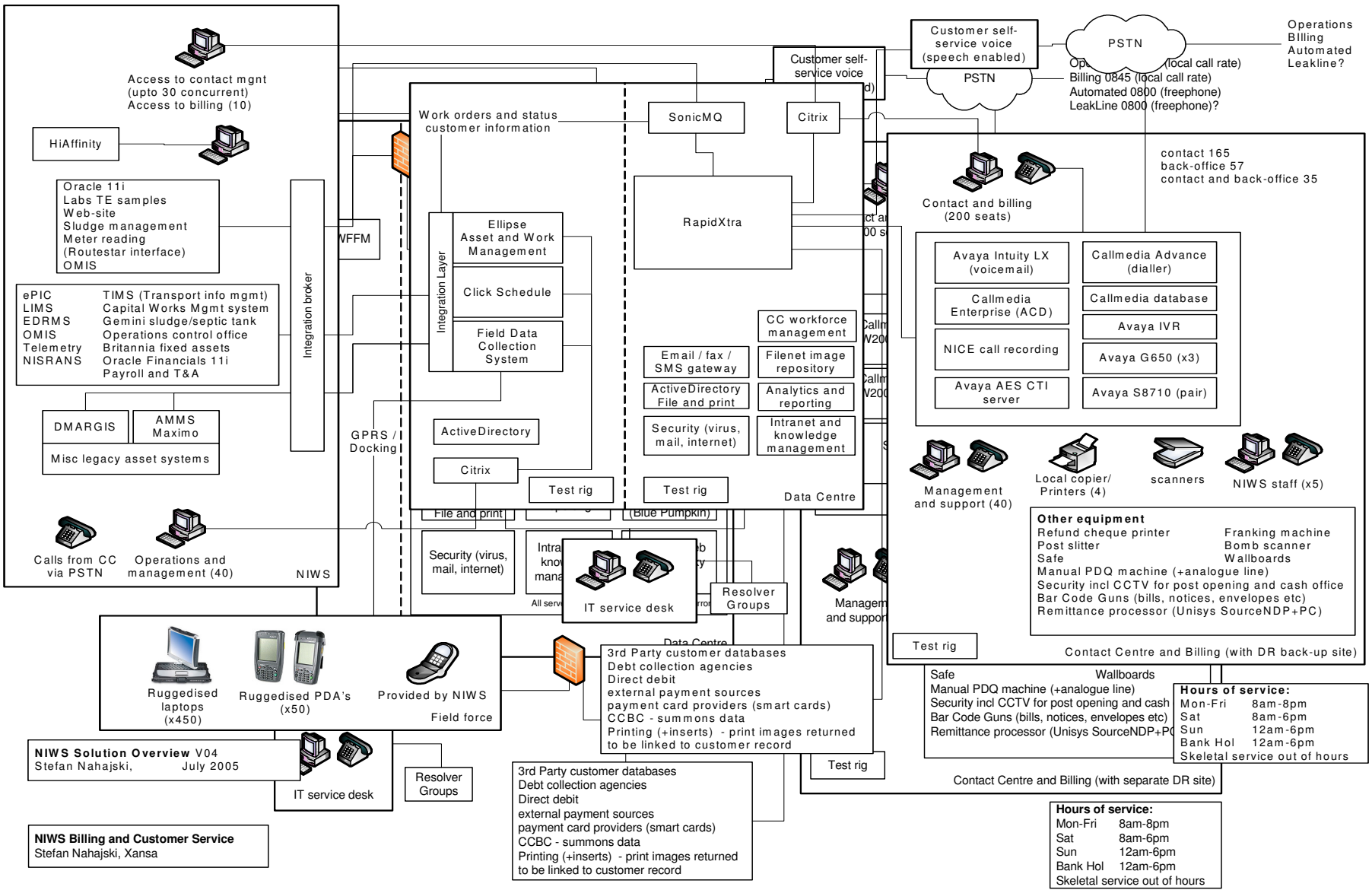
- **Billing Enquiries: 349**
- **Waterline: 0**
- **New Connections: 260**
- **Leakline: 0**
- **Debtline (Collections & Recovery Services): 3,678**

(Customers calling the debt line after hours are rejected. The customer will receive a message informing them that they have called out of hours and that this service is currently closed)

- **MLA: 0**

Appendix 1

The schematics below, supplied by Echo, illustrate the telephony infrastructure and show how the telephony components integrate with the overall operation. Please note however that not all components may have been enabled during the reporting year (i.e. customer self service voice speech enabled).



Annual Information Return 2010

Section 5

Customer Research Appendix

Contents

1. Customer Satisfaction

1.1. One of the fundamental measures concerning the level of service received by customers is customer satisfaction. One of these measures, DG9, concerns the service received when telephoning NI Water. A customer satisfaction survey (Quality of Call Handling) is used to establish performance against this measure.

1.2. Customers' satisfaction with regards to call handling is assessed by McCallum Layton, an independent market research company. McCallum Layton carry out quarterly surveys (Waves) of customers who have called the Company for any reason. The score for the answer to survey question 18 ("*Overall, how satisfied were you with how your call was handled1-5?*") is the call handling satisfaction score.

Wave 1	• Sampling period: Monday 20th April 2009 to Sunday 26th April 2009 (inclusive) • Interview period: Monday 27th April 2009 to Thursday 30th April 2009 (inclusive)
Wave 2	• Sampling period: Monday 20th July 2009 to Sunday 26th July 2009 (inclusive) • Interview period: Monday 27th July 2009 to Thursday 30th July 2009 (inclusive)
Wave 3	• Sampling period: Monday 26th October 2009 to Sunday 1st November 2009 (inclusive) • Interview period: Monday 2nd November 2009 to Friday 6th November 2009 (inclusive)
Wave 4	• Sampling period: Monday 1st March 2010 to Sunday 7th March 2010 (inclusive) • Interview period: Monday 8th March 2010 to Friday 12th March 2010 (inclusive)

1.3. The primary objective is to provide a measurement of customer satisfaction in telephone call handling, by water industry companies.

1.4. The resultant data is required to be statistically robust based on the sample received to allow comparison both between companies each year, and for each company on a year on year basis.

2. Methodology

2.1. For each water company taking part, a target was set of 100 telephone interviews with customers who had contacted the water company in the previous week, for each Wave of the survey, equating to 400 per Water Company per year.

2.2. Overall Northern Ireland Water (NIW) achieved 408 interviews in total.

2.3. All surveys were administered using a Computer Aided Telephone Interviewing (CATI) unit. Each survey was undertaken by multiple interviewers to prevent any possibility of interviewer bias.

3. Sampling

3.1. Sample Provision

3.1.1. NIW is advised of the week in which call data will be collected for a survey two weeks in advance.

3.1.2. NIW is required to record all incoming calls to the contact centre for the seven days in question, irrespective of how calls were handled.

3.1.3. This data is then supplied to McCallum Layton and is password protected for data protection purposes. Data is provided based on an Excel spreadsheet containing the following fields:

- Contact Name (customer or business name);
- Business or Domestic (to indicate if a business or domestic customer);
- Telephone Number;
- Date of contact (date call made to NIW);
- Customer reference number (to trace any responses back through the system if necessary); and
- Operational and Billing flag (to indicate the nature of call).

3.1.4. In addition to the sample, an Audit sheet was completed which detailed the total number of calls received; number of records excluded from the sample and any factors the company felt may have affected their performance during the sampling period. The following table shows the actual number of useable records received in each Wave.

Wave 1	Wave 2	Wave 3	Wave 4	**Total 09/10**
4,151	3,986	4,474	4,151	**16,762**

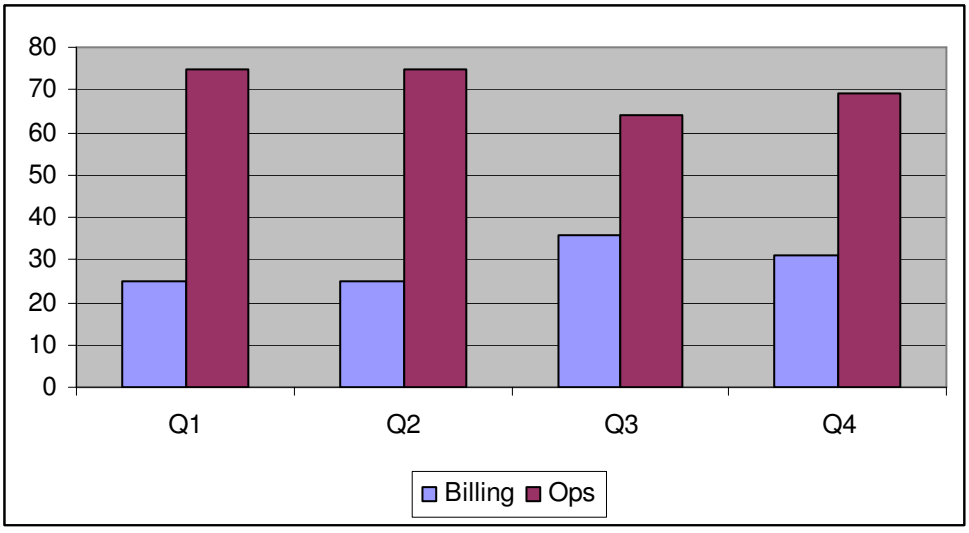
3.2. Sample Management

3.2.1. Upon receipt of the sample, McCallum Layton applied the following sample management procedures for each water company:-

- **Removal of non-useable records –** e.g. overseas telephone numbers, records with no telephone numbers, visually incorrect telephone numbers; and
- **De–duplication –** removal of any customer record which appears in the supplied sample more than once and of customers which have been included in any previous waves that year to ensure no customer is approached to participate in the survey more than once per annum.

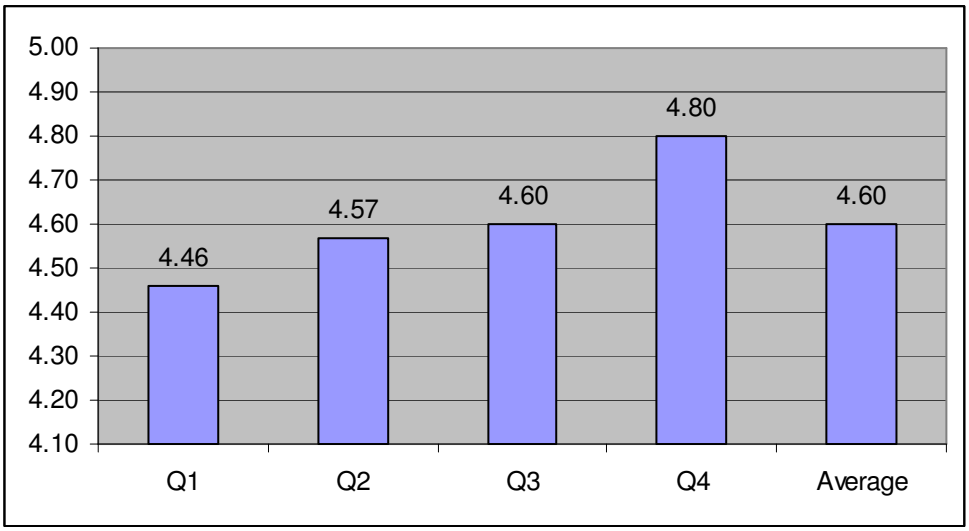
3.2.2. Given that NIW is not billing domestic customers (unlike other UK water companies), it is important to establish the proportion of calls received by day and query type to ascertain the quotas needed to ensure a representational spread of interviews was achieved.

3.2.3. The following table shows the NIW percentage split for billing and operations, per quarter.



4. Overall Performance Assessment

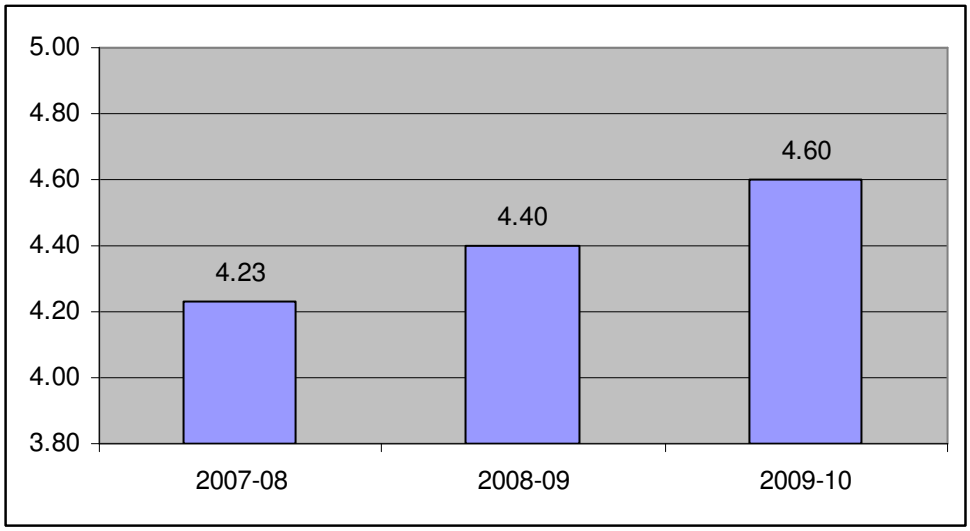
4.1. NIW achieved an overall score of 4.6/5.0 for the reporting year, meeting the target set at the beginning of the year of 4.60, as follows;



4.2. In the last quarter of 2009/2010 NIW was ranked:

- 3rd out of the 24 companies with a score of 4.80, and
- 1st out of the 12 water and sewerage companies.

4.3. Overall, the annual score has increased over the past 3 years, as follows;



5. Customer and Stakeholder Views for the PC10 Business Plan

5.1. As part of the PC10 submission, NIW commissioned the Consumer Council to carry out the customer research for the PC10 Business Plan on its behalf. The project was delivered by ICS Consulting via the OneAM consortium, and PIMR who are a Belfast-based market research company engaged by CCNI to undertake customer consultation on water issues.

5.2. The main findings of the research were:

- Maintaining the current level of drinking water quality was the customer's top priority when considering the water supply service we provide;
- Low water pressure was not an important issue for customers;
- The reduction of internal sewage flooding events was customers' highest priority, not only within Sewerage Services but when considering the service NIW provide in its entirety;
- Customers prioritised reducing the environmental damage the Company caused to inland water ways over pollution to coastal waters and carbon emissions;
- When considering the customer service that they receive from NIW, consumers stated that how quickly the Company responded to them when they needed something was their top priority; and
- NIW's customers have a much higher opinion of the company than media reports would suggest. For example, 82% of customers stated that they were satisfied with the service provided by NIW.

5.3. The research identified 24 recommendations to be taken forwards between CCNI and NIW. These can be found in the report - Tapping into Consumers Views on Water, available on the Consumer Council for Northern Ireland's website by typing water in the search box.

http://www.consumercouncil.org.uk/publications

5.4. During 2009/10, 18 of these recommendations have been progressed to the point of completion with the remaining 6 planned for completion during 2010/11.

5.5. CCNI is planning an 18-month review in September 2010 to report on completion and to demonstrate the importance that NIW and CCNI has put on delivering on these customer views.

6. Codes of Practice

6.1. As required under Licence, NIW has been actively engaged with CCNI in the review of the existing customer Codes of Practice (CoP), which must be submitted to the Utility Regulator by 31st May to comply with licence requirements.

6.2. These were first submitted on 31st May 2007 and we are required to review not less than once in every 3 years. Since the Licence then allows a period of two months for the Utility Regulator to review and approve the Codes.

6.3. The four CoP's, which have been agreed with CCNI, are:

- Water Supply Services;
- Sewerage Supply Services;
- Dealing with Leaks; and
- Complaints.

6.4. We also publish another CoP on Priority Services. This CoP is not a licence requirement and therefore not subject to the same regulatory constraints, although we need to review all Codes in the same cycle given the links and references contained within each.

6.5. Given our target customer base, it is proposed that we adopt a name, format and layout consistent with other NI Utilities to avoid any confusion. It has been proposed that 'Priority Services' will be renamed 'Customer Care Register' and will include Critical Care.