

Northern Ireland Water Ltd

Annual Information Return 2009

To the

Northern Ireland Authority for Utility Regulation



Public Domain Version

Part 2 of 7 containing:

Key Outputs - commentaries for tables 1 - 5

Reporter's Submission

By

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Northern Ireland Water Ltd

Annual Information Return 2009

To the

Northern Ireland Authority for Utility Regulation

Public Domain Version

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Northern Ireland Water Ltd – AIR2009 Submission

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Items mark (x) have been excised as they are considered commercially confidential or of sensitive nature.

Table 1 – Water Service - 1**Commentary by REPORTER****1. Background**

The information and data collected in this table describes and quantifies the activities carried out by the Company in promoting water efficiency. A summary of other companies' performance is published annually by Ofwat in the 'Service and delivery – performance of the water companies in England and Wales 2007-08' report. This provides a reference to track and monitor the NI Water's performance and to compare strategies and practices across the industry.

2. Key Findings

- We believe that the Company methodology and its application are appropriate to meet the Reporting Requirements.

3. Audit Approach

The audit comprised of an interview with the NI Water's system holders, a review of the Company methodology and a review of the table entries. We also undertook a consistency check between the table entries, commentary and the NIAUR Reporting Requirements.

4. Audit Findings**4.1 General**

During the audit the Company explained its water efficiency strategy. We discussed the range of activities the Company has promoted and they outlined several initiatives which have taken place during the year. These activities ranged from activities such as cistern devices distribution water audits to various promotional and publicity events. These initiatives are detailed below in 'Section 4 – Audit Findings and 5 – Company Methodology'.

4.2 Household Leakage

The Company does not offer a free repair or replacement of domestic supply pipes. This policy has remained unchanged since AIR08. We are advised that the customer is liable for the entire cost of the repair. When a leak in a supply pipe is identified NI Water circulates a Leakage Notice to customers which allows the customers to repair the leakage within 28 days. After 28 days upon issue of final notice NI Water may undertake a repair and recover the cost from the customer. The policy is only applicable to domestic customers and does not apply to properties that are used wholly for

commercial purposes. The policy applies to the point of entry to the household, except for common supplies, and does not include the customer's plumbing losses.

There has been an almost double increase (97%) in the figures reported in line 1. We have challenged the Company about this increase in the number of household supply pipes repaired. In 2007/08 NI Water had counted the number of Leakage Notices circulated for a half year and the rest was estimated. We believe the counting of leak notices for the full year should improve the robustness of the repaired value. We discussed a number of points relating to leak notices. Customers are informed at the time of issue of the leakage notice that if they fail to undertake the repair then cost of a repair is recovered by the company.

Lines 2 – 6 are reported as 0. This is because the Company does not offer its customers free or subsidised repairs or replacements. Therefore, total savings achieved and cost in lines 7 and 8 are also zero.

There is a marked difference in supply pipe repair policies between those in England and Wales and in Northern Ireland. In England and Wales companies offer free supply pipe repairs/replacements to its customers. As such the savings reported in England and Wales are larger than those reported by NI Water.

4.3 Household Water Efficiency Methods

Cistern devices (lines 9 to 12)

The number of cistern devices distributed by the Company has increased significantly from last year. In total 2,472 devices were distributed in the Report Year (compared to 188 in 2007/08). NI Water advised that during the year they had given out cistern devices to customers in connection with the Consumer Council for Northern Ireland (CCNI) survey (circa 1,200). This survey was undertaken as part of the Company's consumer research study.

The Company policy is to distribute cistern devices to customers who request a device. Although customers can order cistern devices through the Company's Customer Relations Centre (CRC), the number of cistern devices requested was recorded at zero. As highlighted above, the Company has continued to promote water efficiency, including cistern device distribution, with a number of promotional days throughout the year.

For line 10 - "number of cistern devices installed by household customers" the Company has assumed a fit installation rate of 20%. This is from the Ofwat 'Water efficiency targets 2010-11 to 2014-15 and means that the Company assumes that for customer driven requests, 494 devices (i.e. $0.2 \times 2,472$) have been installed during the year. We discussed with the Company the appropriateness of this assumption and they outlined that they have followed the recommendations given in the Ofwat Good Practice Register.

The Company has made several other assumptions relating to the savings assumed and these are described below:

- percentages of devices installed – 20%
- occupancy rate – 2.5
- numbers of flushes per person per day – 5
- saving per toilet flush – 2.5 litres

To align with other parts of the Annual Information Return the average occupancy rate has been assumed to be 2.5. The detail of this assumption is described in our Table 10 commentary.

We suggested to the Company that smaller cistern devices (Save-a-Flush) could be distributed as the smaller devices may fit more households and customers may be more interested. The Company explained that the newer buildings have already smaller and low level flush cisterns and it is not cost beneficial to have two sizes of cistern devices.

During the audit, the Company illustrated how they had calculated the costs for this initiative. We found a clear audit trail was evident and confirm the Company has only included unit costs of production. We have not undertaken a detailed check on the derivation of these unit costs but these appear reasonable. We confirm the Company's calculation is as stated in its methodology.

Water Butts (lines 13 to 16)

The Company does not promote the sale of water butts to its customers. NI Water outlined that it does not promote or have a partnership to distribute water butts with a private company. Lines 13 to 16 are therefore reported as zero.

Self Water Audit Packs (lines 17 to 19)

The Company has reported 660 packs as being distributed during the Report Year. The Company also advised it has distributed a number of self water audit packs in conjunction with the PC10 survey carried out by CCNI. The Company also explained that NI Water has added a self water audit tool on its website recently. We suggested that the Company could add a number of hits to this site into line 17 in future, as more people are likely to use its website rather than paper based audit packs.

The Company has received 14% of responses from the 660 packs distributed. Subsequently NI Water assumes that these customers will save 10 litres of water a day. We confirm that the amount of water saved a day is in line with the assumption within Ofwat's 'Water efficiency targets 2010-11 to 2014-15'. Using this assumption the calculated savings from the water audit packs is 0.0009Ml/d. In summary, the assumptions are as follows:

- installation rate – 14%
- saving per day – 10 litres

We confirm the costs reported in line 19 relate to production of the self audit packs and prizes of £500 to customers who returned the audit packs. We have checked the audit trail and confirm the number reported is consistent with that reviewed during the audit.

Water Audits carried out by the Company (lines 20 to 22)

The Company has carried out 500 water audits in conjunction with NI Energy Agency (NIEA). The Company has made several assumptions using the Ofwat's 'Water efficiency targets 2010-11 to 2014-15' to calculate the savings reported. These are as follows:

- ratio of customers carried out water audits – 70%
- savings per day – 10 litres

The costs relating to line 22 were the production of water audit and the cost of NIEA who carried out the audit. We did not carry out a detailed audit, however, this seems to be reasonable.

4.4 Non household Water Efficiency Methods

Self Water Audit Packs (lines 23 to 25)

The Company outline that they did not distribute any non-household audit packs to commercial customers during the Report Year. The Company advise that it recognises that savings from commercial water audit is a future opportunity.

Water audits at commercial premises (lines 26 to 28)

NI Water has carried out 4 water audits at its own premises. The savings achieved/assumed is zero as these audits were carried out at the end of the Reporting Year and were not realised in the 2008/09 Report Year. The costs reported by NI Water include the staff costs associated with undertaking the audit.

4.5 Other water saving initiatives

The Company has outlined other water efficiency actions directed at households and non-households which includes leaflets, fridge magnets, shower timers, and their 'Water Bus' exhibition. For each of these actions, the Company has presented the costs and the assumed water savings achieved.

We consider that the water savings associated with these water efficiency actions are

reasonable given the inherent difficulties in calculating water savings from such activities.

The Company has made the following assumptions according to the Ofwat's 'Water efficiency targets 2011- to 2014-15' which are:

- saving per property per day from shower timer – 5 litres
- installation rate of shower timer – 23%

Total costs of these initiatives include costs of production, the Water Bus exhibition, and NI Water staff costs (60% of 2 Water Education staff, and 50% of Water Efficiency officer). The Company explained that this is consistent with AIR08 and we confirm that this appears reasonable.

4.6 Total savings/cost of initiative

During the audit, we found the following inconsistencies between the table figures and commentary. We challenged the Company that:

- line 22 did not match with the figure in a table of 'Household – Water Efficiency Methods' in the Company's draft table 1 commentary.
- sum of lines 12, 16, 19 and 22 did not match with the figure of 'Household – Water Efficiency Methods' in a table of 'Overall Cost Summary' in its draft commentary.
- line 30 did not match with the figure of 'Water Efficiency Work Totals' in the same table as above 'Overall Cost Summary'.

We noted a discrepancy of £548 between the Company's audit record, draft commentary and table. The company advised this was omitted in error and this £548 relates to a £500 prize and £48 transcription error. We have checked the Company's records and believe it is correctly reported. In its final submission we confirm that these have been corrected.

We confirm that these errors were corrected for the Company's final submission.

We also confirm that the numbers reported are consistent to the numbers reported in the Company commentary Table B. This table includes the data reported in the relevant lines of block A to D in the table and also includes additional activities identified by the Company e.g. Water Regulation inspections.

4.7 Water efficiency initiatives

During the audit we discussed both the outcome of these schemes with the Company. Our main findings are detailed below.

Water Bus – The Company advised NI Water's Water Education Team has visited

schools and shows with the 'Water Bus'. There was also a discussion between NI Water and Northern Ireland Housing Executive that, where possible, NI Water accesses to houses to promote water efficiency measures. However in the downturn of economy, the Company could not carry out such work.

CCNI – We understand that NI Water is closely working with CCNI to promote water efficiency in households. In the Reporting Year the CCNI had carried out the customer survey on PC10. This survey also included cistern devices and the customers could install Hippo bags. The results of the survey have been presented by the Regional Development Minister for Northern Ireland on March 2009. The CEOs of NI Water and CCNI also attended this presentation.

5. Company Methodology

We have reviewed the Company's methodology for reporting Table 1 in order to confirm that it is appropriate and meets the Reporting Requirements issued by NIAUR for AIR09.

5.1 Household Leakage

The Company methodologies are satisfactory and described in their commentary. The Company recorded actual numbers of Leakage Notice issued monthly and provided annual figures for AIR09.

5.2 Household/Non-household water efficiency

Spreadsheets held by the system holder are used to obtain the information for Blocks B, C and E. This spreadsheet collects all data on cistern devices, self water audit packs distributed, other promotional materials (such as magnets and shower timers) dispatched. During the audit the Company demonstrated how data is entered into the spreadsheet and how data is filtered in order to derive the data reported.

We have reviewed the Company methodology and believe that the practice adopted is consistent with the stated methodologies and in line with the Reporting Requirements.

6. Company Assumptions

In relation to cistern devices the Company has made several assumptions relating to the savings assumed. These are as follows:

- percentages of devices installed – 20%
- occupancy rate – 2.5
- numbers of flushes per person per day – 5
- saving per toilet flush – 2.5 litres

For Self Audit Packs, the Company has made several assumptions relating to the savings assumed. These are as follows:

- installation rate – 14%
- saving per day – 10 litres

To calculate savings associated water audits carried out by the Company, the assumptions used are:

- ratio of customers carried out water audits – 70%
- savings per day – 10 litres

For savings associated with the shower timer initiative, the assumptions used are:

- saving per property per day from shower timer – 5 litres
- installation rate of shower timer – 23%

7. Confidence Grades

Changes in many of the confidence grades assigned by the Company have improved since AIR08. For line 1 we challenged the Company on confidence grades from C5 to B3. The Company explained that the accuracy of data has improved and now does not rely on extradition of results. We also challenged the Company on how the Company checks these repairs have been done. The Company explained that inspectors check the repairs however there is scope for human error. We therefore believe that the confidence grade of B3 is reasonable.

The confidence grades for the number of household water efficiency methods (lines 9 and 17) are B3 as the Company records monthly reports. We believe this is reasonable given the scope for human error.

The number of audits carried out by the Company in line 20 is B1 as they have an invoice to NIEA. However the Company explained that they did not check whether the contractor had carried out all of audits. In the Reporting Requirements, the Company can not assign a confidence grade of B1. We, therefore, suggest NI Water to assign this line a B2 confidence grade.

Total savings assumed in lines 11, 18 and 21 were calculated according to Ofwat guidance. Therefore the confidence grade of B4 is appropriate as the actual numbers distributed are B3. The costs of the efficiency programmes reported in lines 12 to 19 have been assigned a B3 confidence grade. As these rely a cost estimation we believe a B3 grade is reasonable. For line 22, the Company has an invoice from the contractor and this is the majority of the cost. Thus B2 is reasonable.

For non households, the confidence grade for the numbers of water audits completed by

the Company assign a B1 grade as the Company only carried out audits internally. According to the Reporting Requirements, a confidence grade of B1 is not possible. We suggest this should be A1. The confidence grade for savings from non household audits was A1 as the audits were completed towards the end of Reporting Year. The confidence grade for the costs reported is B3, which we believe to be reasonable as the cost are derived from NI Water staff costs pro rated with an estimate of the time taken to undertake the audits.

We noted that the confidence grades assigned to lines 18 and 21 – savings assumed from water audit packs, and savings assumed from water audit carried out by the Company were B3. We challenged the Company why these lines were different to lines 11, 29 or 32. The Company has changed the confidence grade for line 21 to B4 since the other lines in the table use a similar methodology. We believe a B4 grade is reasonable and ensures consistency with other lines in the table.

Date: 10 August 2009

Table 2 – Key Outputs - Water Service – 2**Block A – DG2 Properties receiving pressure/flow below reference level****Commentary by REPORTER****1. Background**

The information included in this table is used to monitor and compare company performance against the DG indicators.

2. Key Findings

- Comprehensive review of 105,024 properties included in the ‘Under Investigation Register’. Pressure logging exercise confirmed that only 739 UI properties at risk of low pressure, although pressure logging during the winter months may have slightly understated the number of properties.
- For the 10,321 properties currently on the DG2 Register, a comprehensive logging programme was initiated to confirm the status of the properties at risk of low pressure. For AIR09, we found that 5,621 of the 10,321 properties were logged during the year, of which 3,431 are no longer deemed to be at risk of low pressure, although we identified a number of properties that weren’t on the DG2 Register but were adjacent or between confirmed low pressure sufferers.
- The 4,705 properties on the DG2 Register that have not yet been investigated will be subject to pressure logging and verification during the current year.
- 1,808 properties were removed from the DG2 Register as a result of a capital scheme
- DG2 Register is not supported by any sustained level of customer complaint
- NI Water has only excluded 218 properties from the DG2 Register (as an allowable exclusion) on the basis that they are located within 15m elevation of the service reservoir.
- The Company has responded to NI Water’s request for additional information on properties with pressure below 7.5m, however, we do not believe the Company’s response to Line 4a provides a credible reflection of low pressure, and consider the number of properties with pressure <7.5m to be considerably lower than the 320 reported for AIR09. Furthermore, we do not believe this information provides a useful metric.

3. Audit Approach

The audit consisted of interviews with the NI Water system holder and the NI Water Consultant, which included a discussion on the Company methodology for data collection and collation and a review of the programme currently in place to verify the properties currently on the DG2 Register.

4. Audit Findings

4.1 Properties connected at year end (Line 1)

This line contains the total number of properties (domestic and non-domestic) connected to the distribution system at the end of the report year. We note an increase of 4,400 properties connected for water supply only from 2007-08. The number of properties is derived from Northern Ireland Water's billing system (Rapid).

We confirm that the total number of connected properties is consistent with the sum of lines 6, 7 and 8 of Table 4. We note however that the numbers for 2007-08 are not consistent with Table 4 and that the increase in the number of properties given in Table 4 is 4,160 compared with 4,400 in Table 2.

4.2 DG2 - Properties receiving pressure/flow below reference level (Lines 2-4a)

4.2.1 Line 2 – Properties below reference level at start of year

For AIR08, NI Water reported that 10,321 properties were at risk of receiving pressure below the surrogate reference level of 15m in the adjacent main. The estimate was based on results from the Company's existing suite of hydraulic network models and, where a hydraulic model was not available, targeted pressure logging. The properties reported in Line 3 of Table 2 for AIR08 were accepted at face value and were not subject to any validation or verification checks. The primary purpose of the exercise undertaken for AIR08 was to provide an initial DG2 baseline position.

In addition to the 10,321 properties believed to be at risk of low pressure, a further 105,024 properties were also identified for further investigation. This group of properties which were included on the Company's 'Under Investigation Register' were initially identified as receiving a negative pressure (<0m). NI Water believe this large anomaly was caused by a disconnect between some of the model nodes and the latest NI Water GIS system, where the nodes cannot be linked to the models. To better understand this, we undertook a high level review of the Tardee Distribution Zonal Model. We found that the model was originally run using 'Map Basic' and as such properties were not attached to a main or ferrule. As a result of this, the model assumed each ferrule had a 0m elevation, which translated to a negative pressure at the property. The Company advised that all necessary information was in the model, but there was a lack of connectivity between the model data.

4.2.2 Line 3 – Properties below reference level at end of year

For AIR09, NI Water undertook a comprehensive review of the 'Under Investigation Register' and also commenced an exercise to verify the 10,321 properties on the DG2 Register.

In terms of the 'Under Investigation' (UI) review, we found that widespread pressure logging was carried out in order to establish the reliability of data that was contained within the UI Register. These results were then compared to the re-calibrated models to ensure consistency. As a result of this exercise it was found that the majority of UI properties actually received a supply of sufficient pressure, reducing the number of UI properties from 105,024 to 8,064, a reduction of 96,960 properties. We examined the results of the Comber East DMA, and found that the original model suggested that all 1,200 properties in the DMA suffered from negative pressure. Improvements to the connectivity of the model and subsequent 7 day logging of the DMA, confirmed that none of the 1,200 properties were at risk of low pressure. We reviewed the results of the logging to confirm the Company's conclusions.

For the remaining 8,064 properties, which were contained within 306 DMAs, logging points were established on Fire Hydrants adjacent to any group of UI properties or any perceived critical point within the DMA. All logging points were surveyed to establish the elevation and the pressures logged for a continuous seven day period. This exercise resulted in the confirmation that a further 7,325 properties were not at risk of low pressure, with only 739 of the original 105,024 recommended for inclusion onto the DG2 Register.

We conclude that a thorough approach had been adopted to assess the UI properties and that NI Water has sufficient evidence to support the decisions made. Our only reservation with the overall UI review, relates to the fact logging was only undertaken for a seven day period and it was undertaken during the winter months, when demand is typically lower. As such, NI Water may have slightly overstated the number of UI removals.

For the 10,321 properties currently on the DG2 Register, a comprehensive logging programme was initiated to confirm the status of the properties at risk of low pressure. We found that 'Map info' was used to identify logger locations (at 250m centres), such that a logger was located no more than 250m from each DG2 property. In order to confirm the validity of the exercise undertaken, we reviewed the results of the logging exercise completed for the Burnside DMA (in the Ballinrees Resource Zone) and the Banbridge Town Centre DMA (in the Craigavon Resource Zone). For the Burnside DMA, we found that 148 properties were currently on the DG2 Register. The completion of seven day logging within this DMA identified that 25 properties were still at risk of low pressure, with the balance recording a surrogate pressure of between 15-20m, and thus recommended for removal from the DG2 Register. We reviewed a GIS plot of the DMA, the affected properties and the logger locations, to confirm the Company's assessment. Whilst we deemed the assessment to be appropriate, we identified a number of properties that weren't on the DG2 Register but were adjacent or between confirmed low pressure sufferers. We challenged the Company, suggesting that NI Water may have understated the number of properties at risk of low pressure. It appears that the data set used to populate the original models (used to undertake the initial assessment) did not include a comprehensive list of properties. We recommend that NI Water review all properties that are now confirmed DG2 properties and investigate and ultimately add to the DG2 Register all previously unidentified properties in between or adjacent to known DG2 properties.

In summary and notwithstanding the above finding, for AIR09 we found that 5,621 of the 10,321 properties were logged during the year, of which 3,431 are no longer deemed to be at risk of low pressure and as such have been removed from the DG2 Register.

In addition to the above, as a result of the ongoing watermain rehabilitation programme, a number of properties were removed from the DG2 Register as a result of a capital scheme. For AIR09, we found that 1808 properties were removed as a result of 13 separate capital scheme (and confirmed in the above mentioned logging programme). We reviewed the Pre and Post Rehabilitation Assessments (PPRA) for WP02 Portadown and WP11 Kirkinriola to confirm the removals achieved. In summary, we found that in the case of these two schemes, 52km of main was rehabilitated/upsized, facilitating the removal of 250 properties from the DG2 Register.

Whilst the PPRA provides a useful summary of the work completed and benefits derived from the watermain rehabilitation programme, we consider NI Water should develop a formal approvals process and associated audit trail to ensure DG2 outputs are 'signed off' and that sufficient evidence is available to confirm success of the scheme to the signatory's satisfaction.

Overall, we found that for AIR09:

- 739 UI properties were confirmed to suffer from low pressure and added to the DG2 Register
- 3,431 of the 5,621 properties (previously on the DG2 Register) were logged during the year and removed from the DG2 Register as a result of better information
- 1,808 properties were removed from the DG2 Register as a result of a capital scheme and formed part of the 5,621 properties logged above.
- 51 properties were removed as a result of zonal boundary changes and other operational improvements.

Based on the above, circa 4,700 properties currently on the DG2 Register are still to be logged, in order to verify their DG2 status. Based on the success of the logging and capital removal programme to date, where only 331 of the 5,621 logged properties (5,621 – (3,431+1,808)) have been retained on the DG2 Register, we consider the DG2 Register will be further reduced during the current year.

It is interesting and somewhat surprising to note that the current DG2 Register is not supported by any sustained level of customer complaint, although the NI Water customer base is currently not compensated for poor service. However, during the current year, we found that NI Water were starting to receive complaints of low pressure that are being investigated by the Leakage Team. Whilst the two complaints reviewed, at [X] and [X] were subsequently deemed not to be low pressure sufferers, and should have been dealt with by Field Operatives, it demonstrated the process that is in place to investigate pressure problems.

4.2.3 Line 4 – Properties receiving low pressure but excluded from DG2

For AIR09, NI Water has only excluded 218 properties from the DG2 Register (as an allowable exclusion) on the basis that they are located within 15m elevation of the service reservoir.

NI Water advised that they currently do not have the infrastructure in place to validate other allowable exclusions, such as; abnormal demand, planned outages, one-off incidents and short-duration low pressure incidents.

The Company stated (and reiterated in their commentary) that plans were in place to install a comprehensive network of strategically located permanent pressure loggers, to enable them to record such events, and advised that circa 200 loggers will be installed during the current year on a prioritised basis.

4.2.4 Line 4a – DG properties with a pressure below a surrogate level of 7.5m

For AIR09, NIAUR has included an additional line to Table 2 (Line 4a), to assess the number of properties experiencing pressure below a surrogate level of 7.5m. The Company initially responded to this request by including all properties on the DG2 Register recording a pressure lower than 7.5m. We challenged this on the basis that a large number of the properties recording a lower pressure had not yet had their pressure validated. As such, NI Water was providing a misleading indication of the Company's DG2 liability. We discussed this issue with NIAUR and agreed that NI Water should only report properties recording a pressure below 7.5m that have already been validated and confirmed on the DG2 Register at year end.

Based on the above advice, NI Water reassessed their response to this line and confirmed that 320 properties out of the validated DG2 properties were at risk of receiving a pressure below 7.5m. We reviewed the basis of the assessment carried out and found that NI Water has still included a large number of properties with a questionable reported pressure that had not yet been verified and/or confirmed. In summary, we found that:

- Of the 331 logged properties retained on the DG2 Register (out of 5,621), 69 are believed to record a pressure of <7.5m, of which 15 have a recorded pressure of <1.0m
- Of the 739 'Under Investigation' properties added to the DG2 Register during the year (out of 105,024), 259 properties are believed to record a pressure of <7.5, of which 126 recorded a pressure of <0m (down to -123m).

We further challenged this revised figure, as it appears to still include a large number of properties with unrealistic, and in many cases negative, pressures that require further verification work. The Company acknowledged that their response to this line was based on a desk top study of ferrule elevations and logger results, and that further work was required to accurately populate this line. We do not believe the Company's response to Line 4a provides a credible reflection of low pressure, and consider the number of

properties with pressure <7.5m to be considerably lower than the 320 reported for AIR09.

Although we understand the Utility Regulator's reason for asking for this additional information, we are not convinced that this provides a useful metric to NIAUR. Unless a surrogate of 7.5m is to become the driver for pressure related investment, we believe a surrogate pressure of 15m should be used for comparability with E&W. Schemes should be prioritised on a cost beneficial basis, to ensure benefits are maximised for the available investment, and not prioritised purely on the degree of poor pressure: a property experiencing 8m pressure is not necessarily experiencing a poorer level of service to a property receiving 9m pressure.

5. Company Methodology

The Company's methodology is as described in Section 4.2 above. However, NI Water intend to collect DG2 information using a representative network of critical pressure monitoring points, details from which will be converted into numbers of properties at risk of receiving low pressure, by using their GIS system.

The Company is in the process of developing a formal DG2 Register using Microsoft Access. We reviewed progress to date and note that fields have been created to capture the following information:

- Address Information
- DMA Location
- Surrogate Pressure
- Logger Reference
- Reason for addition/removal

We found that the DG2 Register will be hyperlinked to all available information to support that particular properties status on the DG2 Register.

In terms of allowable exclusions, NI Water are aware of the various low pressure events that can be excluded from the DG2 Register, however, in the absence of comprehensive monitoring systems, NI Water are currently only excluding properties that are located within 15m elevation of the service reservoir.

6. Confidence Grades

The Company has not changed the confidence grade for Line 1 from AIR08.

Based on the systems and processes currently being developed by NI Water to identify and report on DG2 incidents of low pressure, we believe a confidence grade for Lines 2-4a of B4 to be appropriate, on the basis, that work is still ongoing to determine their true DG2 liability.

Table 2 - Water Service – 2**Section 2 – DG3 Supply Interruptions, Lines 5 to 19****Commentary by REPORTER****1. Background**

The aim of this indicator is 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.

2. Key Findings

- A review of the data reported by the Company in their commentary and tables shows that DG3 performance has improved marginally during the report year.
- We discussed their interpretation of planned, unplanned, overruns on planned interruptions and on the basis of the discussions held (and incidents reviewed) we are satisfied that the Company's interpretation of the guidance is sound.
- We reviewed the nature of a number of the largest unplanned events affecting NI Water's customers. Whilst we identified some weaknesses, in the majority of cases we were able to follow an audit trail to verify the details of each incident.
- The Company advised that they had undertaken an analysis of the time of no water calls into their customer contact centre and compared these to the start time reported by field managers within OMIS. The Company have only carried out a limited number of checks they have found a number of discrepancies which indicate the start time indicated on OMIS is different to the start time inferred by the time of customer calls.

3. Audit Approach

To verify the data reported by the Company, our audit consisted of an interview with the NI Water system holder, a review of the current Company methodology for data collation and an audit of the data from the Company's systems to the final table. This years data has been compared with last years table entries to identify significant areas of change.

As unplanned interruption data is used as a key performance metric we have reviewed this data with greater scrutiny than the other interruption categories.

4. Audit Findings

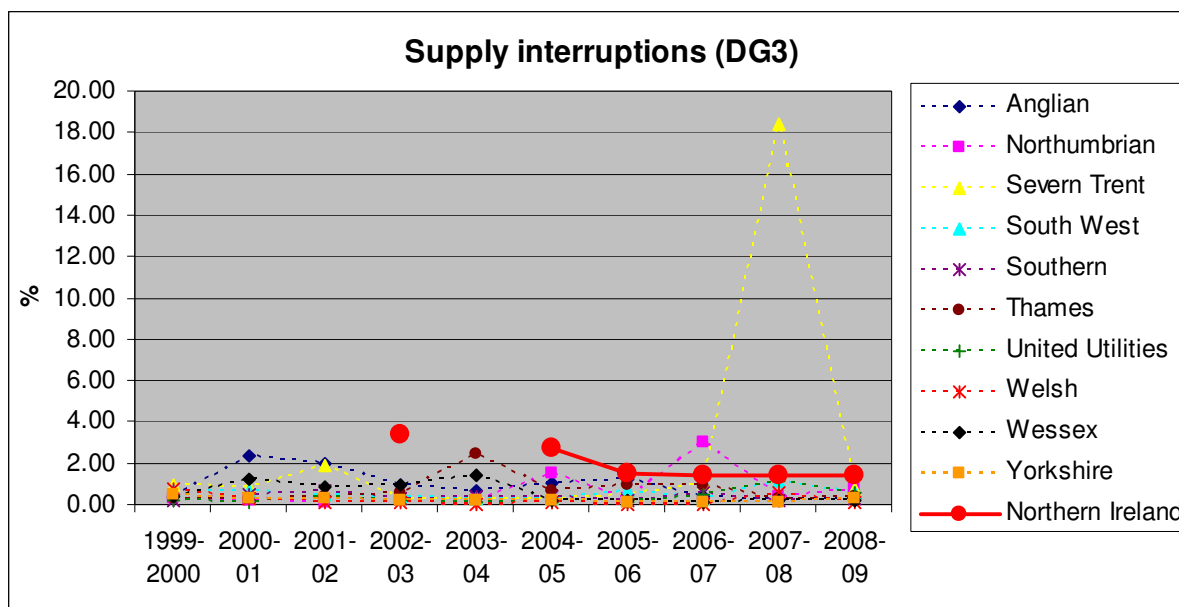
4.1 Reporting System

OMIS is used as the main tool for recording supply interruptions. We found the system is managed by Operations Directorate and Engineering and Procurement Directorate (E&P) and Customer Services Directorate (CSD) do not currently have access. However, interruption data is provided by representatives of these directorates on a monthly basis. Information from the two E&P regions and Customer Services Directorate is provided for input each month on spreadsheets and entered on OMIS by the DG3 System Holder.

4.2 DG3 Performance

A review of the data reported by the Company in their commentary and tables shows that DG3 performance has improved marginally during the report year. Using Ofwat's OPA analysis the Company's score for 2008/09 is 1.40 compared to 1.43 from the previous year.

The graph below shows NIW DG3 score as calculated in Ofwat's OPA analysis compared to other WaSC's. This analysis relates to unplanned interruptions for properties which are reported in lines 6 to 8 (more than 6, 12 and 24 hours). In terms of the Ofwat's assessment criteria, NIW's reported performance for 2008/09 would be graded as 'Acceptable'.



The Company highlighted that in comparing DG3 performance with E&W companies it should be noted that NI Water has more than double the length of water mains per

1,000 connected properties than the E&W average and hence more bursts. NI Water also advised that they have a predominately rural supply area so bursts tend to take longer to locate and repair.

4.2 Summary of discussions

As per the DG3 Reporting Requirements, we questioned the Company on a number of issues regarding the duration and nature of supply interruptions. We discussed their interpretation of planned, unplanned, overruns on planned interruptions and on the basis of the discussions held (and incidents reviewed) we are satisfied that the Company's interpretation of the guidance is sound.

We also questioned the Company's when they consider the start of an incident to be and the Company confirmed that this is the time at which water is first unavailable at the first cold tap in a property. The end of an interruption is considered to be when water has been fully restored to an acceptable pressure to an affected property. The duration of an incident is thus determined by the elapsed amount of time between these start and end definitions.

During the audit we discussed the start time for an unplanned interruption and the Company advised that they had undertaken an analysis of the time of no water calls into their customer contact centre and compared these to the start time reported by field managers within OMIS. Whilst the Company have only carried out a limited number of checks they have found a number of discrepancies which indicate the start time indicated on OMIS is different to the start time inferred by the time of customer calls. We have not reviewed this exercise but recommend that the Company continues to carryout these consistency checks and amend the start times on OMIS if the call time indicated the duration of an incident should be longer than first assumed.

We also questioned the Company on the structure and content of the DG3 Register and we believe it contains the information demanded by the Reporting Requirements. We noted that the Company does not detail each property affected by an interruption but tends to group the listing by particular house numbers in a street or cluster.

4.3 Unplanned Interruptions (lines 5 to 8)

During the audit we reviewed the nature of a number of the largest unplanned events affecting customers. The audit checks carried out for each incident are detailed below. Except where noted, we were able to follow an audit trail to verify the details of each incident. Where possible these incidents were reconciled to upward reports produced at the time of the interruption. A summary of our findings are detailed below.

Incident	Unplanned Categorisation	Duration	Comment
Rasharkin	ok	>24hrs	<ul style="list-style-type: none"> Unplanned interruption associated with pre-planned meter installation. 135 properties affected >24hrs in July 2008
Main-Ards Trunk Main	ok	>24hrs	<ul style="list-style-type: none"> Burst on trunk main resulting in interruption to Portaterry Area in March 2009 220 properties affected >24hrs
Clady Bridge	ok	>24hrs	<ul style="list-style-type: none"> Burst occurred on 8" cast iron main attached to a bridge which made repair complicated. Brackets had to be manufactured and attached to repair burst. 197 properties affected >24hrs in March 2009.

We reviewed the nature of the each incident and believe they have been accurately transposed into Table 2. During the audit we challenged the Company to demonstrate the data held on their DG3 Register was consistent with the guidance set out in the Reporting Requirements and the property counts reported. In addition to the above we asked NI Water to demonstrate the information held on the Register for an additional seven unplanned incidents. These checks revealed consistency to the proforma completed in OMIS.

For several interruptions we noted that the Company had been able to restore supplies by rezoning to some of the affected properties earlier than some others and properties related to these incidents were reported in different time bands. We challenged NI Water on what evidence exists to verify that some properties were restored with supply earlier than others. In response the Company representative sought further evidence from the field operative but was unable to provide definitive records to substantiate the duration of properties affected. However, the Company were able to demonstrate the various ways in which such assessments are made e.g. using property elevation. We would encourage the Company to maintain and improve the recording of 'split interruptions'.

Within their commentaries NIW report incidents which were caused by electrical failures and interruptions which occurred during the night. NIW confirmed these incidents are reported in lines 5 to 8 and are detailed separately within their commentary for illustrative purposes only.

4.4 Planned and Warned Interruptions (lines 9 to 12)

For lines 9 to 12 – "Planned and warned interruptions" there has been significant increases in the number of properties affected by interruptions greater than 3 hours and 6 hours. There have been no planned interruptions greater than 12 or 24 hours. During

the audit we discussed with the Company the reasons for this increase and NI Water explained that the majority of these interruptions relate to the ongoing mains rehabilitation programme which is currently ongoing.

During the audit we questioned the Company's methodology for recording and reporting planned interruptions and met with a representative from the E&P Directorate. The Company collates information on a regular basis from their contractors and this is then forwarded to the DG3 system holder. We found that the Company relies on pro-formae which are completed on site to record details of the interruption including when warning for the interruption was given and when the actual interruption occurred. Copies of the warning card issued to customers are not retained by the Company but the representative was able to provide a copy of a blank notice which is used to warn customers.

We challenged the Company to demonstrate that the records held for a number of incidents were consistent on the DG3 Register were consistent with the proformae completed on site. In total we reviewed three interruptions and confirm the consistency of the information on each completed proformae is consistent with the information held on the DG3 register and each interruption was correctly reported as a planned and warned interruption. We also checked another eight interruptions and confirm that the information collated by E&P is consistent with that held on the DG3 register.

We noted that a large number of interruptions were planned to last a standard length of time (normally 8am to 6pm or 8pm). We queried this to ensure that the Company was not unnecessarily over-estimating durations to ensure interruptions did not overrun. In response NI Water advised that these durations are typical because work is planned to undertake standard length of rehab each day. We believe the Company's explanation is reasonable.

During the audit we challenged the Company on how they classify step testing (in terms of leakage detection) as we were unsure as this would be categorised as a planned interruption or not. The Company explained that they do not classify step testing as a planned interruption as the test would not unduly affect customers. We concur that the Company approach appears reasonable, and consistent to our experience elsewhere, although the Reporting Requirements do not refer to classification of step testing. The Company also advised that they do not record interruptions last less than one hour.

4.5 Interruptions caused by Third Parties (lines 13 to 16)

During the audit we reviewed a number of interruptions the Company had classified as being caused by a third party during one month of the year. We found that a number of these incidents were caused by contractors working on behalf of NI Water. In line with the Reporting Requirements these should be classed as unplanned interruptions and the Company revised these entries accordingly. We also challenged the Company to demonstrate that the remaining third party interruptions for the whole of the 2008/09

Report Year were correctly reported. NI Water revisited these interruptions which led to a number being reclassified as unplanned interruptions. The Company provided the following summary to the Reporter:

“34 out of 39 records in 2008/09 relating to interruptions caused by third parties (>3hrs) have been reviewed by field managers following the identification that in some instances, the interruption category had been wrongly assigned. A further 3 records have sufficient information to enable the correct categorisation to be established. As a result of this review, 11 interruptions have been re-categorised as Unplanned since they were caused by contractors working on behalf of NI Water”.

The overall effect of the re-categorisation of these interruptions is as follows:

Interruption Category	Change	Original Total	Revised Total
Unplanned >3hrs	+496	55,984	56,480
Unplanned >6hrs	+60	8,115	8,175
Third Party Interruptions >3hrs	-496	2,973	2,477
Third Party Interruptions >6hrs	-60	96	36

We understand a further 2 records have still to be reviewed. We have reviewed the adjustments in the table above and confirm they are consistent with the final version of the Company’s submitted table.

4.6 Overruns of Planned Interruptions (lines 17 to 19)

As in previous years, the Company has reported a small number of overruns of planned interruptions. During the audit we discussed the methodology and checks the Company uses to identify overruns of planned interruptions and believe them to be satisfactory. We have not reviewed any specific incidents reported by NI Water.

5. Company Methodology

5.1 General

As reported above, the Company issued the Reporter with a copy of their updated methodology to derive data reported in for supply interruptions. This document contains several definitions which are replicated below for clarity. We believe the definitions used are in line with the Reporting Requirements.

- Interruption - An interruption to supply is defined as the actual loss of water supply to a property, whether planned or unplanned, warned or unwarned.
- 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 is not available the time a ‘no water’ complaint is logged by the Customer Relation Centre.
- 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 is restored.

We also reviewed how the Company classify interruption and believe these are in line with the Reporting Requirements. Again, the definitions used have been replicated below for clarity.

- Planned and warned - This is where notice of an interruption (more than 3 hours) is provided to properties affected at least 48 hours in advance of the beginning of the interruption.
- Unplanned/unwarned interruption - This is when an unplanned, or a planned and unwarned, interruption to supply occurs. Properties receiving less than 48hrs notice of a planned interruption (more than 3 hours) are to be counted as 'unplanned' and reported under this category.
- Overruns of planned interruptions - When a planned interruption and warned interruption begins before or 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.
- Third party interruptions - A third party is defined as anyone who does not act for, or on behalf of NI Water. This category is intended to cover damages to NIW's mains or other equipment which directly or in indirectly results in an unplanned loss of supply to enable the damage to be repaired.

We challenged the Company on the whether a planned interruption which starts before the warned time should be classified as an overrun or an unplanned interruption. The Company advised this would be classified as an unplanned interruption. We believe this is in line with the Reporting Requirements and confirm the Company methodology has been amended to provide further clarity on this point.

We discussed with the Company their approach to counting the number of properties affected by an interruption and they advise properties are identified from either a manual count off network maps and in other cases are estimated using a GIS polygon. We have not reviewed the accuracy of the property counts made by the Company.

5.2 Reporting Procedures

OMIS is used as the main tool for recording supply interruptions. We found the system is managed by Operations Directorate and Engineering and Procurement Directorate (E&P) and Customer Services Directorate (CSD) do not currently have access. However, interruption data is provided by representatives of these directorates on a monthly basis. Information from the two E&P regions and Customer Services Directorate is provided for input each month on spreadsheets and entered on OMIS by the DG3 system holder.

NI Water's reporting procedures require field engineers to record events on standard proforma. The data collected on these sheets is subsequently uploaded on OMIS via the defined input screens on a monthly basis. The DG3 system holder extracts data from OMIS each month and transfers it into a worksheet entitled the 'Composite Interruption Data' file, which is the DG3 Register. This data is combined with data from other Directorates to form a complete listing.

We questioned NI Water on several aspects of their reporting protocol and specifically how they ensure interruption which may been uploaded into OMIS late or remained open (and therefore editable) on the system when the data is extracted. The Company representative advised that controls are in place to track late returns and the previous months report is re-run at the end of the following month to ensure that any late entries are picked up.

5.3 Quality Assurance

During the audit the Company demonstrated the quality assurance controls they have in place to ensure the data collation process is robust. Over the course of our audits we saw evidence of data challenge and the correction of interruption details received from field operatives. We therefore believe that interruption data is being appropriately administered.

We also note that the Company's methodology demands that each monthly return of DG3 data is signed off by senior management.

6. Company Assumptions

The Company assumptions relating to the classification and duration of incidents have been discussed above.

7. Confidence Grades

The Company has assigned a B grade to all lines associated with DG3. We concur with this assessment.

In recognition that there are known weaknesses in the Company's reporting system (e.g. links to customer contact records) and the inherent difficulties in estimating exact property counts for interruptions less than 12 hours the Company has assumed a confidence grade of B3 which we believe is reasonable.

However, for interruptions greater than 12 hours the Company has assigned a confidence grade of B4. We challenged the Company on the rationale behind the distinction between interruptions greater and less than 12 hours and NI Water advised that they have revised the confidence grade downwards for properties of the longest duration interruptions as there is lower number of properties affected and therefore a

lower margin or error. Whilst we recognise the rationale of the Company's explanation, the reporting methodology is identical for all the DG3 lines regardless of interruption duration. In addition it is most probable that the longer duration will be subject to greater scrutiny and review (e.g. upward reporting) which should improve the accuracy of the reporting process. The Reporter's view is that these grades assigned to all DG3 related lines should be consistent.

Population – Winter (Line 20)**1. Audit Findings**

The estimate of winter population is based on the total projected population in Northern Ireland, as reported in Table 7 Line 17, plus an allowance for non-resident population staying in visitor accommodation over the winter months (circa 1% of total population).

The Company has provided a detailed explanation of the approach adopted to derive winter population in their commentary for Table 2.

2. Assumptions

There are no assumptions to disclose.

3. Confidence Grades

The Company have assigned a confidence grade of B2 to this line. We consider this confidence grade to be appropriate, based on the Company's reliance on multiple data sources to derive the number of non-resident visitor nights.

DG4 - Restrictions on use of water (Lines 21-23)

4. Audit Findings

There have been no DG4 restrictions on the use of water during the report year. As such the entries for lines 21, 22 and 23 are correctly recorded as zero.

5. Assumptions

There are no assumptions to disclose.

6. Confidence Grades

The Company have assigned a confidence grade of A1 to this line. We consider this confidence grade to be appropriate.

Date: 10 August 2009

Table 3 – Sewerage Service – Internal Flooding**Commentary by REPORTER****1. Background**

The information included in this table is used to monitor and compare company performance against the DG indicators.

The DG5 – Annual Flooding Summary includes properties internally flooded as a result of overloaded sewers and other causes

The DG5 – Properties on the “at risk” register cover properties at risk of flooding more frequently than once in twenty years and once or twice in ten years, problem status of the properties on the register and annual changes to the register.

2. Key Issues

- The Company has made significant improvements to the data collection and investigation processes for internal flooding incidents resulting in improved reporting in block A.
- The Company found that a large number of calls are logged as flooding which are not actually flooding and have made changes to the customer contact centre scripts in the hope that this would improve the logging of calls. This does not appear to have made a significant difference to the volume of flooding incidents logged in the first three months of 09/10, however these incidents have not yet been fully investigated to determine whether they were actually flooding incidents or not. This should continue to be monitored to assess whether it is making a difference and whether any further improvements can be made to the customer contact centre process.
- There is still significant work to be done to populate the At Risk Register (block B) with data of any quality. The Company has populated the first section of this block with data that it acknowledges is highly inaccurate and has left the remainder of the block incomplete.
- The Company is taking action to improve the At Risk Register and expects to be able to complete Block B in AIR10, although it there may still be some issues with the quality and integrity of the data.
- The Company currently assigns at risk properties to the 1 in 10 year category as the default if there is no other information, however this is contrary to the NIAUR guidance, which states that properties should be entered onto the 1 in 20 year register unless there is evidence for another category. This is being discussed with NIAUR.

3. Audit Approach

The audit consisted of an interview with the NI Water system holder to discuss the methodology and data that has been used to populate this table as well as plans for improving the data in future years.

4. Audit Findings

4.1 General

The Company has improved its methodology for reporting properties flooded within the year, providing much more reliable data in block A of this table. In AIR08, the Company used unverified customer contact centre reports of flooding to populate this table and apportioned the incidents to various causes based on the proportions reported by English and Welsh water companies.

For AIR09, each reported incident has been investigated and either excluded because it was found that there was no flooding or included and attributed to a cause.

While we have confidence that all reported incidents have been investigated and classified, we have concerns that some unreported flooding may not be being captured because the investigation process does not allow for checking of neighbouring properties when flooding has been found to have occurred.

The data for properties on the at risk register remains relatively incomplete, however the Company expects to be able to complete this for AIR10.

4.2 DG5 Annual Flooding Summary

Reported flooding properties have significantly decreased since AIR08, however this decrease is not a “real” decrease, but a result of the improved methodology. The numbers reported in AIR08 reflect the total number of flooding incidents logged by the customer contact centre. In AIR09 each logged incident was investigated either by the sewer maintenance contractor or by NI Water staff and information was taken from flooding report forms, field manager reports or by directly contacting the customer to determine whether the incident was actually flooding, and if so, what the cause was.

Of the 837 logged internal flooding incidents, 23 were flooding (other causes) and 3 were flooding (overloaded sewers). The remaining 811 were excluded, largely because the investigation confirmed that there had been no flooding. A few (11) were excluded because they were a repeat call within 3 days of the first call, and therefore assumed to be related to the original event. Of the excluded events, 279 were restricted toilet use.

A very small number of events logged as internal flooding were actually found to be internal flooding and this raises concerns over the customer contact centre logging process. Clearly it is preferable to have calls logged conservatively and incidents to be investigated and found not to be flooding than vice versa, however the investigation

process is a time consuming one and the incorrect logging of calls results in unnecessary investigation work. The Company has recognised this and revised the contact centre scripts in the hope of reducing the number of incidents incorrectly logged, however this does not yet appear to have made a difference to the volume of logged incidents in 09/10. This should continue to be monitored and may need further revision.

There were 3 properties flooded in the year (overloaded sewers) and 3 flooding incidents in the year (overloaded sewers), showing that no properties experienced internal flooding twice in the year as a result of overloaded sewers.

Based on data from the Meteorological Office, none of the flooding incidents resulted from severe weather.

The collected information does not have sufficient detail to determine whether uninhabited cellars are flooded, however on the basis that Northern Ireland has very few uninhabited cellars (or basements), the Company has reported no uninhabited cellars flooded.

Whereas in AIR08, the flooding incidents were attributed to various causes in the same proportion as the English and Welsh water companies had reported, in AIR09 the flooding report forms and other information allow the cause of each flooding event to be identified.

Of the 23 flooding incidents due to other causes, 4 were due to equipment failures, 16 due to blockages and 3 due to collapses.

The Company has reported 3 properties that have flooded more than once in the last 10 years. This is based on the combination of the more accurate information from the 08/09 year and the less accurate historical data. There is a high level of uncertainty in this figure as a result of the uncertainty in the historical records and this will only be able to be gradually improved over time as more accurate information is added year by year to the 10 year record.

The proportion of properties that have flooded is very low compared with that reported for English and Welsh companies and it is not clear why this might be the case. One reason may be that when logged flooding incidents are investigated, only the property that has reported flooding is investigated, whereas other companies will also check neighbouring properties and sometimes find unreported instances of flooding. NI Water primarily uses complaints logged by the customer contact centre as the source of flooding data, whereas other companies will more pro-actively seek to find instances of flooding, such as by sending flooding questionnaires to all recipients of Water Industry Act notices.

Northern Ireland Water has responsibility for sections of laterals and drains that are not the responsibility of similar water and sewerage companies in England and Wales. In the reporter's commentary to AIR08, it was suggested that the Company may wish to address this as a special factor in business plan submissions and that to inform this

assessment it was recommended that the Company maintain records that distinguished incidents caused by defects on laterals from incidents caused by defects on the main sewer. The Company has not implemented this recommendation so it remains valid.

4.3 DG5 Properties on the At Risk Register

Block B of the table is largely incomplete as a result of a focus on block A for this reporting period. The Company does have a programme and resources in place to improve the data in the at risk register and expects to be able to complete this part of the table in AIR10. This has been outlined in the Company's methodology and will involve workshops and face to face meeting with Operations and Engineering staff to review each flooded property to establish the cause of flooding and whether any engineering works have taken place to alleviate the flooding. This is expected to be complete by March 2010.

No change has been made to the properties at risk of flooding twice in 10 years.

The 1 in 10 year register has been updated with 745 properties consisting of:

- 3 properties flooded in 08/09
- 742 properties from analysis of historical data

The historical data is unverified and the events do not have flooding incident reports. Some sources of data distinguish between internal and external flooding, whereas others do not. Data that mentioned blockage, equipment failure or collapses were excluded.

Because of the poor quality of the data that has been used, this line entry remains highly inaccurate.

No change has been made to the properties at risk of flooding once in 20 years.

We note that the Company is allocating flooded properties to the 1 in 10 year register by default rather than the 1 in 20 year register as recommended in the NIAUR guidance. We understand that NI Water met with NIAUR earlier in the year to discuss this and it remains unresolved. It may be that these properties are moved to the 1 in 20 year for subsequent returns, depending on the agreement that is reached with NIAUR.

The rest of the table remains incomplete as a result of insufficient information. Resources have been allocated to address this for the coming year and it is expected that block B will be completed in AIR10.

5. Company Methodology

5.1 DG5 Annual Flooding Summary

The number of domestic properties is the total number of domestic properties connected to the sewerage system (including voids) at the end of the year. This is a change of methodology from AIR08 in line with recommendations from the AIR08 reporter.

The base data for internal flooding records is downloaded from Ellipse and originates from calls logged as internal flooding by the customer contact centre. This data is sorted so that records from the same property are grouped together and records from the same incident are grouped together. In AIR08, the counts of incidents and properties were input directly into Table 3 and there was no means of verifying them.

For AIR09, each incident has been investigated by the sewer maintenance contractor or by a field manager and data is collected on flooding report forms and field manager reports. Based on this information, each incident is either categorised as confirmed internal flooding or confirmed no internal flooding. For those that have experienced internal flooding, the cause of the flooding is identified. If the flooding can not be attributed to a blockage, equipment failure or collapse, it is assumed to be due to an overloaded sewer. For those that did not experience internal flooding, it is recorded if they experienced restricted toilet use.

Data is excluded from the count if it is a repeat call within 3 days of the original call. NI Water have found that, based on analysis of past records, repeat calls within 3 days of the original call tend to be related to the original event.

Data is also excluded if it is clean water flooding – i.e. burst water main.

The data is then tabulated on a month by month basis for each category (excluded no flooding, excluded repeat call, excluded clean water, flooding blocked sewer, etc) and then summed to provide annual totals for input into Table 3.

For each of the events classified as internal flooding (overloaded sewer), a met office report is obtained to ascertain whether the flooding was due to severe weather conditions. In AIR09, none of the events were considered to be due to severe weather conditions, although if they were, the property would then be checked against historical records to see whether the property was at risk of flooding in a 1 in 10 year event. Only those properties that flooded in a severe weather event and were not at risk of flooding in a 1 in 10 year event would be included in line 4.

NI Water does not collect sufficient information to determine whether uninhabited cellars are flooded, and based on the fact that there are very few basements or uninhabited cellars in Northern Ireland, it assumes there were no uninhabited cellars flooded. It is recommended that for future years the flooding report form or field

manager's report includes a check box for "flooding uninhabited cellar only" so that this information can be collected and lines 5 and 11 can be completed more reliably.

In order to report the number of properties that have flooded more than once in the last 10 years, the more reliable data from 08/09 (i.e the data that has been verified through investigations) has been combined with historical data in order to identify those properties that have reported internal flooding more than once in the last 10 years. Historical data has been gathered from many sources and has generally not been verified through investigation.

Sources include:

- central claims unit (claims for flooding against Northern Ireland Water Service recorded between 1983 and Feb 2007 – only data since 2000 has been used for this analysis),
- drainage area studies,
- Northern Ireland Water Service eastern division flooding records (00/01 to 02/03)
- customer enquiry management system (provides data from customer contacts from March 2004 to November 2006),
- work planning system (1997 to 2003 and April 2005 to March 2006 – only data since 2000 has been used for this analysis),
- captrax,
- anecdotal evidence and
- ellipse.

All properties that have recorded internal flooding as a result of other causes more than once in the last 10 years based on the combination of these data sources are counted and reported in line 7.

Because of the variety of data sources and the fact that there are not flooding incident reports for the historical data, this data is considered to be poor quality, which is reflected in the confidence grade assigned to line 7.

5.2 DG5 Properties on the At Risk Register

NI Water has focussed resources on improving block A of this table and is not yet in a position to be able to input reliable information into block B.

No changes have been made to block B with the exception of line 13 – properties at risk of flooding in 1 in 10 year event. This has been updated from two sources:

- 08/09 annual flooding records
- review of historical records

The three internal flooding events that were attributed to overloaded sewers in the 08/09 year (line 2) were added to the 1 in 10 year at risk register.

The historical records (as listed above under the annual flooding summary) have been reviewed. Any reports that included blockage, equipment failure or collapse as the cause of the flooding have been excluded. Workshops were held with Operational and Asset Management staff to identify projects that have been carried out to alleviate flooding in past years and the properties benefiting from those projects have been excluded. The remaining properties have been assigned to the 1 in 10 year register by default, pending further investigation.

We note that NI Water is defaulting properties onto the 1 in 10 year register pending further investigation, whereas the NIAUR guidance states that properties should be put onto the 1 in 20 year register unless there is information showing that it is at risk of flooding more frequently. This should be reviewed for AIR10.

NI Water has assigned budget and resources to carrying out the investigation and analysis that is required to populate block B and expects to be able to complete this section of the table for AIR10.

6. Assumptions

It is assumed that repeat calls logged within three days relate to the same event and are therefore counted as a single event rather than two events. This is based on the Company's analysis of historical data, which suggests that when several calls are made from the same property within three days, they relate to the original event.

It is assumed that there has been no flooding of uninhabited cellars only, on the basis that Northern Ireland has very few houses with either basements (inhabited) or uninhabited cellars.

Flooding resulting from overloaded sewers (or that can not be attributed to other causes) is added by default onto the 1 in 10 year register. This is contrary to the NIAUR guidance document however, as discussed in the under Audit Findings, this matter is still being resolved with NIAUR.

7. Confidence Grades

A confidence grade of B2 has been assigned to line 1. This is inconsistent with Table 13, which has assigned confidence grades of C3 to connected properties, therefore recommend a confidence grade of C3 for line 1.

A confidence grade of B2 was originally assigned to lines 2, 3, 4, 6, 8, 9 and 10. Given that there may be unreported flooding incidents that have not been captured through the contact centre process and because neighbouring properties of those flooded have not been investigated, we believe that this confidence grade should be B4. Although the company has done a lot of work to significantly improve the accuracy of the data in these

lines, because the numbers reported in these lines are so small, a change of only one property would exceed the accuracy implied by a confidence grade of B2. NI Water has agreed to change this confidence grade.

A confidence grade of C4 was originally assigned to line 7, reflecting the less accurate historical data that has been used. However given that the number reported in line 7 is so small, we believe that a confidence grade of CX would be more appropriate as it is quite possible that number of properties that have flooded more than once in the last 10 years is double (or more than double) the three properties reported in this line. NI Water has agreed to change this confidence grade.

A confidence grade of DX has been assigned to lines 5 and 11 (uninhabited cellars), which is appropriate, given that the information collected does not have enough detail to determine whether uninhabited cellars have flooded and on the basis that Northern Ireland has few uninhabited cellars, a value of zero has been assumed.

A confidence grade of D6 has been assigned to line 13 (1 in 10 risk register), which is appropriate.

A confidence grade of DX has been assigned to lines 12, 14 and 15, which is appropriate.

8. Consistency Checks

- Lines 18 to 33 have not been completed, therefore there are no consistency checks relevant for this table.

Date: 10 August 2009

Table 3a – Sewerage Service – External Flooding**Commentary by REPORTER****1. Background**

The information included in this table is used to measure the frequency of actual flooding of external areas from the public sewerage system by foul water, surface water or combined sewage

The DG5 – Annual External Flooding Summary includes properties externally flooded as a result of overloaded sewers and other causes

The DG5 – Areas on the external “at risk” register cover 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 and annual changes to the register.

2. Key Findings

- The Company has focussed its efforts and resources on improving the information in Table 3 (internal flooding) so the data in this table (external flooding) remains of poor quality.
- The Company has assigned budget and resources to this table for AIR10 and it will be investigating all logged external flooding complaints in the 09/10 year as it has done for internal flooding complaints for AIR09. This will greatly improve the data in block A of this table in AIR10.
- The Company does have plans to develop the external at risk register, however this is not expected to be significantly improved for AIR10 given that the focus for AIR10 will be on the internal flooding risk register and the annual flooding summary for external flooding

3. Audit Approach

The audit consisted of an interview with the NI Water system holder to discuss the methodology and data that has been used to populate this table as well as plans for improving the data in future years.

4. Audit Findings**4.1 General**

The focus for AIR09 has been on improving the quality of data in Table 3, therefore the methodology for Table 3a remains unchanged from AIR08 and the data is of similarly poor quality. Efforts are being put into improving the data quality of block A for AIR10.

4.2 DG5 Annual Flooding Summary

Reported external flooding incidents have significantly increased since AIR08 (approximately doubled). This reflects a significant increase in the number of incidents logged as external flooding by the customer contact centre, although it does not necessarily mean that there has been an increase in the number of actual flooding incidents – without investigations and flooding incident reports this can not be known.

The Company believes that the increase may be due to the wet summer of 2008.

The Company has attributed almost half of the recorded flooding incidents to severe weather based on analysis of met office data. This analysis involved reviewing monthly reports issued by the met office and identifying those dates where reference to “heavy rainfall” or “flooding” in some part of the province was made. The number of external flooding incidents attributed to severe weather was then calculated as the number of “heavy rainfall” days / 365 x the total number of external flooding incidents. This will yield a highly inaccurate estimate of the number of flooding incidents attributable to severe weather because:

- the threshold for the met office reporting “heavy rainfall” appears to be considerably lower than the 1 in 20 year event that is required by NIAUR as the standard for severe weather.
- the heavy rainfall may have only been experienced in part of the province, and may be unrelated to the locations where flooding has been reported.
- it does not allow for the fact that the properties flooded may be at risk of flooding more frequently than once in 20 years (such properties should be excluded from this count in accordance with the guidance).

This issue was noted in the AIR08 reporter’s commentary and has been addressed in the revised methodology for table 3. It is expected that it will be addressed in the revised methodology for table 3a in AIR10.

There is little value in analysing the remaining reported results of external flooding because they have simply been proportioned to various causes based on JR07 data for England and Wales and therefore bear no real relation to the actual causes of flooding in Northern Ireland. In AIR10, when each report of external flooding has been investigated, there will be more meaningful data in this table to comment on.

4.3 DG5 Properties on the At Risk Register

Block B of the table remains unchanged from AIR10 as a result of focussing on table 3 and block A of table 3a for this reporting period.

Although there are plans to develop the external at risk register, it is unlikely to be sufficiently advanced to provide improved data in this section in AIR10.

5. Company Methodology

5.1 DG5 Annual Flooding Summary

The methodology for the annual flooding summary has not changed from AIR08 and is based on unverified flooding complaints made to the customer contact centre and logged in Ellipse. For AIR10, the Company will be investigating each complaint, as it has this year for the internal flooding complaints, to confirm whether or not flooding did occur and to ascertain the cause of the flooding.

The external flooding complaint data is downloaded from Ellipse and sorted by location and date so that duplicate entries can be removed.

Duplicate complaints made from the same address within 3 days are removed as these are assumed to be related to the same incident. This data is then compared to the internal flooding incidents. External flooding incidents occurring at the same address and date as confirmed internal flooding incidents are removed from the external flooding data. This means that an incident that causes both internal and external flooding is only logged as an internal flooding incident in line with the guidance. However a property that experiences only external flooding in a separate event to the internal flooding event will be counted on the annual external flooding summary (in line with the guidance).

The remaining data represents an entry for each separate external flooding incident at each property and is used as the basis for completing block A of this table.

Lines 1 and 7

The basic data is further analysed and duplicate property entries are removed (i.e. where a property has reported two or more separate instances of external flooding). This leaves a list of all properties that have experienced flooding at least once in the year. For this return, NI Water currently does not have information on the cause of the flooding, so it has divided the properties between “overloaded sewer” and “other causes” in the same proportion as the average of the water companies in England and Wales for JR07.

Lines 2, 3, 4, 5, 9, 10 and 11

The basic data is further analysed and sorted according to address. Entries are grouped together to identify those relating to the same street within 3 days and these duplicate entries are removed. This leaves a list of all incidents in the year that have affected one or more properties in a street. For this return, NI Water currently does not have information on the cause or the location of the flooding, so it has divided the incidents between “overloaded sewer” and “other causes” in the same proportion as the average of the water companies in England and Wales for JR07.

The “overloaded sewer” incidents are then divided between “cartilage”, “highway” and “other external areas” and the “other causes” incidents are divided between “equipment failure”, “blockages” and “collapses” on the same basis.

Line 6

In order to determine the number of incidents attributable to severe weather, the Company has reviewed met office monthly reports and identified dates when “heavy rainfall” or “flooding” were noted. The number of “heavy rainfall” days in the year has been used as the basis for determining the proportion of flooding incidents that were attributable to severe weather. As discussed in the audit findings, this methodology has serious shortcomings and it is expected that it will be revised in AIR10 when more complete and accurate flooding incident data will be available.

Line 8

The basic data for 08/09 has been combined with historical records of flooding from the external flooding database. These records include all determined and undetermined records. This data was then taken through a series of sorting and elimination processes to reduce the list to those properties with more than one complaint of external flooding with an interval between complaints of more than three days but less than ten years.

As the data does not allow identification of the cause of the flooding the proportion of flooding due to overloaded sewers has been taken as the same proportion as the average of the water companies in England and Wales for JR07.

5.2 DG5 Properties on the At Risk Register

The at risk register for external flooding only includes those records determined as DG5 reportable. Incidents are not DG5 reportable if they were due to equipment failure, blockage or collapse, if the return period of the storm was less frequent than 1 in 20 years or if the mitigation work is complete and the external area is no longer at risk of flooding. Those records that are still under investigation (i.e. undetermined) are not included on the register.

The register has not been updated since last year due to a focus on the internal at risk register. Although the Company does have plans to update the external at risk register, prioritisation of the internal at risk register and the external annual flooding summary means that it is unlikely to be any more complete for AIR10.

6. Assumptions

It is assumed that repeat calls logged within three days relate to the same event and are therefore counted as a single event rather than two events. This is based on the Company’s analysis of historical data, which suggests that when several calls are made from the same property within three days, they relate to the original event.

The cause of the flooding (overloaded sewer, equipment failure, blockage, collapse) and the location of the flooding (cartilage, highway, other external areas) is assumed to be in the same proportion as that which has been reported by the water companies in England and Wales in JR07.

7. Confidence Grades

A confidence grade of D6 has been assigned to lines 1 to 11 on the basis that the data that has been used is unverified customer service centre logs of customer complaints. These numbers would be expected to reflect an upper limit of actual flooding incidents as it is likely that, when investigated, some of the reports were not related to foul or surface water flooding.

A confidence grade of DX has been assigned to lines 12 to 15 on the basis that the at risk register is incomplete. These numbers would be expected to rise significantly in future returns once the records are determined.

8. Consistency Checks

- Line 5 is the sum of lines 2 to 4.
- Line 15 is the sum of lines 12 to 14.

The following validation check is not possible as the Company does not record for lines 16-25.

- $\text{line 15 previous year} - (\text{current year line 20} + \text{line 21} + \text{line 22} + \text{line 25}) + (\text{current year line 23} + \text{line 24}) = \text{line 15 current year}.$

Date: 10 August 2009

Table 4 - Customer Service – 1**Commentary by REPORTER****DG6 Response to billing contacts (lines 1 to 5)****1. Background**

These lines collect data on the number of billing contacts received and the time taken to respond to them. This information is used to inform and compare performance for the DG6 indicator.

2. Key Findings

- The overall number of billing contacts has increased by approximately 28,000 or 53%. This increase is thought to be as a result of the billed customer base increasing due to the introduction of unmeasured non-domestic billing during the year.
- We have reviewed a total of 14 written and a small number of telephone DG6 contacts to test various aspects of the Company's methodology. Our checks were generally satisfactory but some concerns were noted (see Section 4 for details).

3. Audit Approach

To verify the data reported our audit consisted of an interview with the NI Water system holders, an audit of the data from the Company's systems to the final table and a review of the current Company methodology for data collation. This years data has been compared with last years table entries to identify significant areas of change.

We have checked data reported in the final submission for consistency with previously audited information.

4. Audit Findings

During the year NI Water announced its intention to change the contractual arrangements of the Crystal Alliance consortium, which provides support in customer contact and billing services. We discussed the change in contractual arrangements and the Company advised this would allow NI Water taking direct management control of the core customer service support activities.

This change was effective on the 3 July 2009 and as such the AIR09 submission relates to a period under the previous contractual arrangements. We are aware that a number of known weaknesses identified in previous audits have not been fully addressed in the

2008/09 Report Year due to the difficulties in the previous contractual arrangements. The Company advised that as they now have direct management control, then this should afford them greater access to data and more flexibility in implementing changes to the processes and methodologies employed. Indeed, our most recent audits and other anecdotal evidence suggest that the Company is already benefitting from this change.

During the current Report Year we would therefore expect the Company's processes and methodologies to improve further and NI Water to address any known weaknesses. NI Water advised of the programme of work they intend to undertake (e.g. DG6, DG7 workshops) and the systems they intend to implement (e.g. a CRM tool), which we believe should all help the Company to improve performance. We propose to report on the progress of these initiatives and improvements in our AIR10 commentaries.

In our AIR09 audits we have reviewed a number of aspects of the Company's methodology. We have documented our audit findings below in the following structure:

- Section 4.1 – Overall DG6 performance
- Section 4.2 – Dealing with paper based contacts
- Section 4.3 – Dispatch bills requests
- Section 4.4 – Telephone contacts
- Section 4.5 – QA procedures

4.1 DG6 Performance

NI Water report that they have received 81,370 billing contacts during the year. When compared to the previous Report Year the overall number of billing contacts has increased by approximately 28,000 or 53%. This increase is thought to be as a result of the billed customer base increasing due to the introduction of unmeasured non-domestic billing during the year.

In terms of responding to DG6 billing contacts, the Company has reported that they dealt with 98.6% of contacts within 5 working days 0.01% were dealt with in more than 10 working days. This represents an improvement in performance from that reported in AIR08.

Using the Ofwat's performance classification, the NI Water's reported performance in 2008/09 is classified as 'good' (>95% within five working days and less than 1.5% over ten working days). The performance reported in AIR09 is also better than the SBP 08/09 DG6 target which was >97% within five working days.

Within their commentaries the Company explain that they have excluded contacts associated with "Customer Readiness" communications campaign which was run up until the end of May 2008. We questioned the Company the rationale behind this

exclusion and the volume of contacts received from this campaign. NI Water advised they received around 10,300 pieces of contact. These contacts are grouped into 2 main categories:

- Customer Moves which were processed as part of an additional campaign as a result of the original readiness packs not including the effective dates for the TOR to enable the customer move to be performed and also focusing on VAT and industry classifications. These forms referred to PO Box 1021 and due to this were not classified as DG6
- Direct debit forms received which were part of readiness pack and referring to PO Box. 1021, and due to this were not classified as DG6.

4.2 Paper based correspondence

All Customer contact information is managed through customer contact and billing system Rapid Xtra.

We reviewed the operation of Rapid and confirm the principles of the Company's methodology are appropriate to meet the Reporting Requirements. All incoming correspondence is scanned and indexed before being passed to an Agent. The Rapid system subsequently offers work allocation, tracking and retrieval functions to the Company.

During our audits we reviewed a sample of correspondence received by the Company during the year. This sample was chosen at random from contacts received in January, February and March 09. Our audit checks were designed to check the following:

- Correct categorisation
- Correct application of the DG6 Reporting Requirements, which included:
 - dispatch
 - substantive replies
 - application of response criteria
 - date recording on systems.
- Evidence of appropriate audit trails

A summary of our audit findings are detailed below.

Film Number	Frame Number	Contact Type	DG6 Allocation	Audit Finding	Comment
[X]	[X]	Charges	Ok	Satisfactory	We challenged NIW to show that a customers account was set up on the date advised to the customer. NIW subsequently provided evidence to the Reporter to substantiate this
[X]	[X]	Customer move	Ok	Satisfactory	
[X]	[X]	Other	Ok	Observation	Bill dispatched day after contact closed
[X]	[X]	Other	Ok	Satisfactory	Contact closed, no action required. Note made on customers account
[X]	[X]	Charges	Ok	Satisfactory	
[X]	[X]	Detail Changes	Ok	Satisfactory	Resolved by telephone
[X]	[X]	Detail Changes	Ok	Satisfactory	
[X]	[X]	Customer Move	Ok	Satisfactory	
[X]	[X]	Charges	Ok	Satisfactory	
[X]	[X]	Charges	Ok	Satisfactory	
[X]	[X]	Metering	Ok	Satisfactory	
[X]	[X]	Charges	Ok	Satisfactory	
[X]	[X]	Detail Changes	Ok	Satisfactory	
[X]	[X]	Other	Ok	Observation	Request for change of billing addresses requested by customer but copy of response not shown on the system. NIW was able to provide a copy of the revised sent to the customer to verify account details had been changed.

Whilst our checks looked specifically at contacts classified on receipt as DG6, we also questioned the Company on the types of correspondence classified as non-DG. We challenged this aspect to ensure that written pieces of correspondence from a wider population should not be classified as DG6 (or DG7) items. NI Water representative advised that the overall volume of such correspondence was low. The Company representative was able to demonstrate that for the previous 3 months (April, May and June 09) an average of approximately 1.5% of written contacts were classified as non-DG items.

Despite this relatively small proportion, we tested 10 pieces of correspondence which had been classified as non-DG. In all of the items reviewed we concur with the Company's classification. We found that whilst correspondence was wide ranging it generally related to (non-billing) requests for information. Therefore on the basis of the checks carried out we believe the Company's allocation methodology is sound.

In general, we found the Company's methodology for dealing with DG6 written correspondence to be sound. However, from our audits of DG6 (and DG7) we note the following:

Written contacts

We found that mail received after 2pm is logged as being received on the next working day which is not in strict accordance with the Reporting Requirements. NI Water advised that this practice is unchanged from the 2007/08 Report Year but that they intend to implement process changes during the current year which will ensure that all mail is logged on date of receipt. We questioned NI Water on the volume of correspondence which is received after 2pm and the Company advised that under normal circumstances all post is received in the morning.

Emails (and faxes) received on non-working days

During our audit we noted instances of emails being received on non-working days but not logged as being received until the next working day. For example a complaint received on a Saturday would be logged as being received until the beginning of the next week (e.g. Monday) which would be recorded as the receipt date and day zero. This is not in strict accordance with the Reporting Guidance which requires the contact to be recorded as being received on the date it is delivered to the Company even if this is not within normal working hours (with the next working day being recorded as day 1). A consequence of this is that emails received on non-working days and responded to on day 10 could be misclassified, as the guidance effectively gives 9 days to respond to a email complaint received on a non-working day.

Emails (and faxes) dispatched outside of normal office hours

We also questioned NI Water whether complaints are responded via email outside of office hours (e.g. by homeworkers) and if so how these responses would be dated. In response the Company advised that all responses are dispatched inside office hours.

- Use of holding replies

NI Water explained that they do use holding replies and in our audit checks we reviewed several examples of these types of replies. From the discussions held we believe the Company's approach to these types of contacts is in line with the Reporting Requirements. We also noted numerous instances where the Company has used multiple holding responses before a customers contact is closed out fully. These generally relate to complaints about operational issues where additional investigatory work needs to be undertaken. We have not reviewed the Company's process for tracking these replies nor the internal process for dealing with these types of complaint.

Within their commentaries the Company highlight several initiatives they plan to implement during the coming Report Year which will help to improve the control of contacts subject to holding responses. This issue will be revisited in our AIR10 commentaries.

4.3 Dispatch of copy bills

During the audit we challenged the Company on how they record the date of dispatch for items such as copy bills. NI Water advised that there are a variety of ways in which a copy bill (or other stationery) could be sent to a customer. We found that if a customer called to request a copy bill this could be actioned through the Company's billing system which would subsequently be picked up and processed by the Company's Provider for printing and dispatch. The Company advised that their Agent has a 2 day Service Level Agreement to action these items, but for reporting purposes the date when the action was requested would be reported.

The Company concurred this could be the case, however the Company methodology should ensure that a telephone contact requesting a copy bill should be actioned (and closed) within the 5 days criteria in the Reporting Requirements even though contact was closed for reporting purposes at the time of the call i.e. day 0. We have not undertaken any checks on the Company's provider to confirm compliance with their Service Level Agreement for bill dispatch.

4.4 Telephone billing contacts

As we have found elsewhere the vast majority of DG6 billings contacts are received by NI Water over the phone. We found that of the circa 80,000 contacts received by the Company, the majority (76%) were received via NI Water's dedicated billing line. Similarly, we found that the vast majority of these were responded to at the time of the call and were responded to within 5 working days.

During the year we undertook brief checks on the Company's call handling process. In total we listened to six calls and on the basis of the checks carried out we believe the Company's methodology and recording of these calls is sound.

4.5 Quality Assurance

During our audit work we queried what QA controls NI Water operates on the calls/correspondence received. The Company outlined the various controls in place including the administration of the Crystal Alliance contract and the performance checks undertaken by the Customer Service office.

We specifically reviewed the performance checks undertaken by the performance team and believe the checks undertaken to test the quality of the service are soundly based. The activities undertaken by the customer service office include the monitoring of live telephone calls and the review of selected responses to correspondence to test. The Company explained how feedback is disseminated back to the agents and whilst the sample sizes are relatively small we also believe that the checks undertaken should help drive further improvements. NI Water advised that they intend to implement a Quality

Development Plan (QDP) during the year which will increase the number of checks of this type.

5. Company Methodology

To confirm the methods used by the Company are as described and are in line with the Reporting Requirements, we performed a series of reviews and audit checks. From these checks we are content that the approach adopted is in line with their stated methodology.

On the basis of our audits from AIR09 we have provided a summary of our findings and the Company's methodology below.

- NI Water outsources its' customer contact, billing services and complaint handling to Crystal Alliance. All customer contact is managed centrally by Crystal Alliance.
- All written correspondence is received and processed by Crystal Alliance. Correspondence is opened and date stamped on the date of receipt. At this point, correspondence is allocated between various categories including correspondence relating to DG6 (billing contact) and DG7 complaints.
- Written complaints about billing are recorded in DG7 (Table 5) not DG6.
- NI Water assumes that all mail received after 2pm is received the next working day.
- We found that emails received on non-working days are classed as being received the next working day. Similarly we found all emails received after 2pm are classed as being received on the next working day. This is not in strict accordance with the Reporting Requirements.
- Once correspondence has been opened and indexed it is routed to an agent for action. Managers maintain a list of prioritised contacts which ensures that contacts are dealt with in line with the SLA and regulatory timescales.
- Contacts are closed when a response is sent to the customer by the contact team. We discussed with the Company various logistical points of this process including the times of collection and dispatch, resourcing issues and contingency plans to ensure all mail is dispatched on the same day a contact is closed. From these discussions we believe the practice adopted by the Company is suitable (except for external dispatches) to ensure satisfactory compliance with the Reporting Requirements.
- A high proportion of billing contacts are counted from the telephone system. Calls to these lines are recorded on Rapid.

Within their commentary, NI Water explains its methodology for reporting complaints received in one reporting period but not closed until the following year. Please see our DG7 commentary (Section 5.2) for further details on how these are reported within the AIR submission. The Company highlight that there is a risk that contacts which remain open at year end could go unreported. We understand that this is because the 1096 will include both carry over figure and those which will be closed back to date of holding response in previous year, therefore a number may be unreported as closed in year

2008/09, but will not be double counted. NI Water confirmed they are unable to confirm the numbers in each category.

6. Company Assumptions

NI Water publishes a number of telephone numbers for different specific purposes. The Company assumes that all calls on the specified billing contact lines will be billing contacts. It is assumed that there is only a low level of customers dialling the wrong number. We confirm that these are reasonable assumptions, appropriate for the volume of calls received.

7. Confidence Grades

The Company has applied a confidence grade of B3 to all the DG6 related information in the table. Whilst data for this line is derived from corporate system which should provide robust data there are known weaknesses in the reporting process e.g. dating of correspondence and use of holding replies. As such, we concur with the assessment made by NI Water.

Date: 10 August 2009

Connected properties, Lines 6-8**1. Background**

This section of Table 4 collects details on the number of connected properties broken down by service category.

2. Key Findings

- Our audits indicated satisfactory compliance with the guidance and we support the data and confidence grades applied.

3. Audit Scope

We carried out an audit with the Company's system holder for these lines. Our audit consisted of a review of the Company's methodology and the systems the Company employs to transpose the data from its billing files into the table.

4. Audit Findings

- *Line 6 – Number of properties connected for water supply only*

We note an increase of 5,972 properties connected for water supply only from 2007-08.

- *Line 7 – Number of properties connected for water and sewerage services*

We note that the number of properties connected for both water and sewerage services has decreased by 1,653 since 2007-08.

- *Line 8 – Number of properties connected for sewerage services only*

We note that the number of properties connected for sewerage services has decreased by 159 since 2007-08.

4.1 Consistency Checks

We confirm that the sum of lines 6, 7 and 8 of Table 4 are consistent with Line 1 – Total connected properties at year end in Table 2. As noted in our reporting for Table 2, we note however that the numbers for 2007-08 are not consistent between these two tables as the increase in the number of properties given in Table 4 is 4,160 compared with 4,400 in Table 2.

5. Confidence Grades

The Company has increased its confidence in the numbers reported in lines 6, 7 and 8 from B3 to A2. The Company reports that confidence grades are now A2 as the data is taken directly from the Rapid Xtra Property Summary Report. We are satisfied with these confidence grades.

Date: 10 August 2009

Table 5 - Customer Service – 2**Commentary by REPORTER****DG7 - Response to written complaints, Lines 1-9****1. Background**

The DG7 indicator shows the total number of written complaints received and the number dealt with within the specified time bands.

2. Key Findings

- The total number of complaints received by the Company has increased by 41% or 1,083 complaints in real terms (see Section 4.1 for details).
- We have reviewed a total of 14 written complaints to test various aspects of the Company's methodology. Whilst generally satisfactory our checks did reveal some weaknesses in the Company's methodology (see Section 4 for details).
- In checking the Company's final submission we noted an error in the calculation of line 3 and believe that this value should be reported as 97.6% rather than 98.1%.

3. Audit Approach

To check the accuracy of the information reported, our audit consisted of an interview with the NI Water line holders, an audit of the data from the Company's systems to the final table and a review of the current methodology for data collation. This years data has also been compared with last years table entries.

4. Audit Findings

During the year NI Water announced its intention to change the contractual arrangements of the Crystal Alliance consortium, which provides support in customer contact and billing services. We discussed the change in contractual arrangements and the Company advised this would allow NI Water taking direct management control of the core customer service support activities.

This change was effective on the 3 July 2009 and as such the AIR09 submission relates to a period under the previous contractual arrangements. We are aware that a number of known weaknesses identified in previous audits have not been fully addressed in the 2008/09 Report Year due to the difficulties in the previous contractual arrangements. The Company advised that as they now have direct management control, then this should afford them greater access to data and more flexibility in implementing changes to the processes and methodologies employed. Indeed, our most recent audits and other anecdotal evidence suggest that the Company is already benefitting from this change.

During the current Report Year we would therefore expect the Company's processes and methodologies to improve further and for any known weaknesses to be addressed. NI Water advised of the programme of work they intend to undertake (e.g. DG6, DG7 workshops) and the systems they intend to implement (e.g. a CRM tool), which we believe should all help the Company to improve performance. We propose to report on the progress of these initiatives and improvements in our AIR10 commentaries.

4.1 Line 1 - Total written complaints

For AIR09, the Company report that the total number of written complaints received has increased. Overall the number of complaints has increased by 41% or 1,083 complaints in real terms.

NI Water explained that they believe the increase in complaint volumes is predominately related to an increase in written complaints received relating to the introduction of unmeasured bills which commenced in April 2008.

4.2 Lines 2 to 5 – DG7 Performance

Despite the total number of written complaints increasing, the Company has improved the level of performance in responding to complaints compared to the AIR08. Overall, the Company report 98.1% of written complaints were responded to within 10 working days and 0.4% of written complaints were dealt with in more than 20 working days. [X]

Using this revised value the Company's reported performance is marginally behind their SBP target (98.08%) of contacts dealt with within 10 working days.

Using the equivalent Ofwat assessment criteria for DG7, the NI Water's performance for 2008/09 Report Year would be classified as 'acceptable'.

4.3 Audit Checks

To test the Company's DG7 methodology we reviewed a sample of written DG7 complaints. In total, we reviewed a total of 36 complaints. We confirm these were selected at random from contacts received by NI Water in January, February and March 2009.

The purpose of our checks was to confirm that the methods used by the Company are as described in their Levels of Service methodology. In reviewing each DG7 contact we checked the following;

- the contact has correctly been classified as DG7
- the Rapid system correctly records the incoming and response date
- there was an audit trail evident for each complaint
- the nature of the complaint (to inform table 5a)
- the response to the complaint is substantive.

To select a sample to review, prior to the audit we asked the Company to provide details of all the written complaints they had received between January and March 09. NI Water supplied a list of all written complaints received during this period and we selected a sample of ten complaints to review. Following this initial review we tested a further five complaints relating to water quality to specifically test the substantiveness of the Company's response.

Our audit checks covered complaints received by both post and email and the results of our checks tabulated in summary below.

Reference	DG7 Contact Type	Date Check	Audit Finding	Comment
[X]	Unmeasured Billing	ok	Satisfactory	Holding reply sent
[X]	Water Quality	See comment	Shortcoming	<ul style="list-style-type: none"> • Email received Tues 10/03 9.09 but logged in 11/03. • Outgoing email response dated 24/03 but date stamped 25/03 • Reporter opinion that reply is not substantive (see below)
[X]	Water	ok	Satisfactory	Holding reply sent
[X]	Wastewater	ok	Satisfactory	Dating of email correspondence ok
[X]	Wastewater – sewer flooding	ok	Satisfactory	ok
[X]	Water	ok	Satisfactory	Holding reply sent
[X]	Wastewater complaint	ok	Observation	Email received on non-working day but logged as next working day
[X]	Water Quality	ok	Satisfactory	Compliant passed from DWI on customers behalf. Response sent back to DWI, hence no interaction with customer.
[X]	Wastewater – sewer flooding	ok	Satisfactory	ok
9230209	Wastewater – sewer flooding	ok	Satisfactory	ok

In general, we found that the Company's approach is consistent with their stated methodologies.

We found all the complaints reviewed were correctly classified as DG7 written complaints. Our audit checks covered complaints received by both post and email.

We also questioned the Company on the types of correspondence classified as non-DG. We challenged this aspect to ensure that written pieces of correspondence from a wider population should not be classified as DG7 (or DG6) items. NI Water representative

advised that the overall volume of such correspondence was low. The Company representative was able to demonstrate that for the previous 3 months (April, May and June 09) an average of approximately 1.5% of written contacts were classified as non-DG items.

Despite this relatively small proportion, we tested 10 pieces of correspondence which had been classified as non-DG. In all of the items reviewed we concur with the Company's classification. We found that whilst correspondence was wide ranging it generally related to (non-billing) requests for information. Therefore on the basis of the checks carried out we believe the Company's allocation methodology is sound.

- Dating of correspondence

Written contacts

We found that mail received after 2pm is logged as being received on the next working day which is not in strict accordance with the Reporting Requirements. NI Water advised that this practice is unchanged from the 2007/08 Report Year but that they intend to implement process changes during the current year which will ensure that all mail is logged on date of receipt. We questioned NI Water on the volume of correspondence which is received after 2pm and the Company advised that under normal circumstances all post is received in the morning.

Emails (and faxes) received on non-working days

During our audit we noted instances of emails being received on non-working days but not logged as being received until the next working day. For example a complaint received on a Saturday would be logged as being received until the beginning of the next week (e.g. Monday) which would be recorded as the receipt date and day zero. This is not in strict accordance with the Reporting Guidance which requires the contact to be recorded as being received on the date it is delivered to the Company even if this is not within normal working hours (with the next working day being recorded as day 1). A consequence of this is that emails received on non-working days and responded to on day 10 could be misclassified, as the guidance effectively gives 9 days to respond to a email complaint received on a non-working day.

Emails (and faxes) dispatched outside of normal office hours

We also questioned NI Water whether complaints are responded via email outside of office hours (e.g. by homeworkers) and if so how these responses would be dated. In response the Company advised that all responses are dispatched inside office hours.

- Use of holding replies

Within our audit checks we noted a several instances where the Company issues holding responses to customer complaints. This effectively closes the contact for regulatory reporting but the contact remains open on the Company's system to ensure a response is issued to the customer. We queried how the Agent ensures that a holding response is tracked and the Company advised that each advisor maintains a spreadsheet of each

contact which flags when an update needs to be provided to the customer. In our checks we found a number of complaints had multiple holding responses whilst further investigations took place.

Within the sample of complaints selected we reviewed one complaint [X] where a holding response had been issued to the customer and closed for reporting purposes. The complaint related to a water quality issue and the holding response advised the customer that “the relevant department had been informed of your enquiry and will be making a site visit in due course to investigate this matter.” We do not consider this to be a substantive reply as the Reporting Requirements demands that a holding reply can be counted as a substantive response it informs the customer what further action needs to be taken in response to the query and includes the date by which investigations of further actions will be complete and by when the customer will receive further communication from the company. NI Water concurred with our view and we undertook checks on an additional sample of contacts (all related to water quality) to ensure that this issue is not widespread. We reviewed an additional 4 contacts from a larger sample of approximately 25 contacts and the results of these checks are illustrated below.

Reference	DG7 Contact Type	Date Check	Audit Finding	Comment
[X]	Water Quality	ok	Satisfactory	Multiple Holding Response used
[X]	Water Quality	ok	Shortcoming	Reporter opinion that reply is not substantive
[X]	Water Quality	ok	Observation	Related to complaint highlighted above [X]
[X]	Water Quality	ok	Satisfactory	Compliant passed from DWI on customers behalf. Response sent back to DWI

In all but one of the sample reviewed we consider that all the replies issued were substantive. In one complaint reviewed we found a similar issue that the reply was not considered substantive as the response did not set an expectation when the action would be carried out or when the customer would hear from the company again. On the basis of the checks carried out we advise that the Company should consider reviewing the process employed to deal with such operational complaints and the substantiveness of the replies given.

- Substantiveness of Responses

We confirm that all replies reviewed, except for those highlighted above, were considered substantive.

- Dispatch

We also questioned the Company on various logistical points of the dispatch process, including the times of collection and dispatch and resourcing issues to ensure all mail is dispatched appropriately. On the basis of these discussions we are content NI Water's approach is consistent with their stated approach and with the NIAUR Reporting Requirements.

4.4 Treatment of emails (and faxes)

We asked the Company to clarify the processes for email communication and found in general it is treated in the same way as written correspondence. Emails are logged, date stamped, indexed and passed to an Agent as per the Company's methodology statement. We tested NI Water's methodology for recording the receipt date of a complaint received via email and the outcomes of these checks are detailed above.

4.6 Use of holding replies

NI Water explained that they do use holding replies and in our audit checks we reviewed examples of these types of replies. From the discussions held we believe the Company's approach to these types of complaint is in line with the Reporting Requirements but we reviewed two instances where we consider the holding response was not substantive.

We also noted numerous instances where the Company has used multiple holding responses before a customer's complaint is closed out. These generally relate to complaints about operational issues where additional investigatory work needs to be undertaken. We have not reviewed the Company's process for tracking these replies nor the internal process for dealing with these types of complaint. However, we recommend that the Company endeavours to consider the use of multiple holding responses and improves the visibility of actions across its operations.

4.7 Exclusions from the DG7 indicator

NI Water advised that they have not excluded any complaints from the DG7 indicator.

The NIAUR Reporting Requirements allow complaints to be excluded for a number of reasons (e.g. about non-appointed activities, are anonymous). If in future Returns NI Water excludes complaints from the DG7 indicator, we recommend that clear audit trails are maintained to support the exclusion. The Reporter would normally expect to review and substantiate a sample of such exclusions.

4.8 Postal Strikes

We questioned NI Water as to whether the mail strikes had a material impact on their operations (and performance) as they would not have received incoming mail or been able to dispatch mail on certain days. In response the Company advised that they do not believe interruptions in the postal service have had an impact on their operations in

2008/09.

4.9 Complaints to debt agencies

We questioned the Company if they used any debt agencies to collect outstanding non-domestic debt on behalf of NI Water. We were concerned to ensure that complaints to any external agents were included within the Company's DG7 reported volume of complaints.

In response to this challenge NI Water advised that they do collect outstanding debt via these means but all correspondence is dealt with by NI Water and included within the Company's reported performance. On the basis of the Company's explanation we believe their approach is in line with the Reporting Requirements. However, our audit checks have not sampled any of these types of contacts.

5. Company Methodology

5.1 Overview

To confirm the methods used by the Company are as described and are in line with the Reporting Requirements, we performed a series of reviews and audit checks. From these checks we are content that the approach adopted is in line with their stated methodology.

On the basis of our audits from AIR09 we have provided a summary of our findings and the Company's methodology below:

- NI Water outsources its' customer contact, billing services and complaint handling to Crystal Alliance. All customer contact is managed centrally by Crystal Alliance.
- All written correspondence is received and processed by Crystal Alliance. Correspondence is opened and date stamped on the date of receipt. At this point, correspondence is allocated between various categories including correspondence relating to DG6 (billing contact) and DG7 complaints.
- NI Water assumes that all mail received after 2pm is received the next working day.
- We found that emails received on non-working days are classed as being received the next working day. Similarly we found all emails received after 2pm are classed as being received on the next working day. This is not in strict accordance with the Reporting Requirements.
- All Customer contact information is managed through customer contact and billing system Rapid Xtra.

- Once correspondence has been opened and indexed it is routed to an agent for action. Managers maintain a list of prioritised contacts which ensures that contacts are dealt with in line with the SLA and regulatory timescales.
- Contacts are closed when a response is sent to the customer by the contact team. We discussed with the Company various logistical points of this process including the times of collection and dispatch, resourcing issues and contingency plans to ensure all mail is dispatched on the same day a contact is closed. From these discussions we believe the practice adopted by the Company is suitable to ensure satisfactory compliance with the Reporting Requirements.
- NI Water also maintains a separate customer service escalation team which deals with more severe or repeat complaints which cannot be dealt with within the normal operating rules of Crystal Alliance. Complaints dealt with by the escalation team continue to be processed by Crystal Alliance through its Rapid Xtra systems subject to the same processes and rules of reporting as other complaints and are included in the reported figures.

5.2 Reporting

To report data for line 1 the Company relies on data extracted from CorVu reports. To report data for lines 2 to 4 the Company extracts data from Rapid Xtra system. NI Water demonstrated how these reports are run and demonstrated the consistency of the audit trail. The Company did however advise that whilst holding responses close the contact for reporting purposes the contact remains open on their system until a final response is issued by the contact team. NI Water further explained that the configuration of their system tracks a closed response to a holding response. We have not undertaken any checks on the configuration or accuracy of this process but understand closed contacts are automatically traced back to any holding response which has been issued.

Within their commentary, NI Water explains its methodology for reporting complaints received in one reporting period but not closed until the following year. We understand for AIR09, if a complaint was received in the 2008/09 Report Year then this would be included line 1 of Table 5. If a complaint received in 2008/09 is addressed by a holding response in the 2009/10 year (and subsequently closed out the Company's system with a final response) the response time will be reported in AIR10.

For complaints which are received in 2008/09 and a holding response is issued in same year but a final response is not issued until the following year then closure of these complaints would not be reported in either the 2008/09 or 2009/10 Report Year. NI Water have acknowledged this weakness and advised that 31 complaints closures have not been reported in either the 2007/08 or 2008/09 Report Year.

5.3 Quality Assurance

During our audit work we queried what QA controls NI Water operates on complaints received. The Company outlined the various controls in place including the administration of the Crystal Alliance contract and the performance checks undertaken by the Customer Service office.

We specifically reviewed the performance checks undertaken by the performance team and believe the checks undertaken to test the quality of the service are soundly based. The activities undertaken by the customer service office include the monitoring of live telephone calls and the review of selected responses to correspondence to test. The Company explained how feedback is disseminated back to the agents and whilst the sample sizes are relatively small we also believe that the checks undertaken should help drive further improvements. NI Water advised that they intend to implement a Quality Development Plan (QDP) during the year which will increase the number of checks of this type.

6. Company Assumptions

There are no further material assumptions that we have identified.

7. Confidence Grades

Within their draft commentary and tables the Company assigned a confidence grade of B4 to all the lines relating to the DG7 indicator. NI Water subsequently provided a rationale for this grading within their commentaries and the Reporter concurred with the assessment made.

[X]

Date: 10 August 2009

DG8 - Bills for metered customers, Lines 6 – 12**1. Background**

This indicator identifies the proportion of metered customers who receive bills during the year based on actual meter readings and the proportion based on estimated readings.

2. Key Findings

- The Company report that 93.2% of customers received a bill based on a meter reading in 2008/09. The reported performance is also marginally below the Company's target for 2008/09 which was 95%.
- The Company has undertaken work during the year to define the accounts excluded from the DG8 indicator. As a result the numbers of accounts excluded from the indicator has increased significantly.

3. Audit Approach

To verify the information provided by the Company our audit consisted of an interview with the NI Water system holder, a review of the current methodology for data collation, an audit of the data from the Company's systems to the final table and a comparison with last years table entries.

We also checked the data in the final submission for consistency with previously audited data.

4. Audit Findings

During the year NI Water announced its intention to change the contractual arrangements of the Crystal Alliance consortium, which provides support in customer contact and billing services. We discussed the change in contractual arrangements and the Company advised this would allow NI Water to take direct management control of the core customer service support activities.

This change was effective on the 3 July 2009 and as such the AIR09 submission relates to a period under the previous contractual arrangements. We are aware that a number of known weaknesses identified in previous audits have not been fully addressed in the 2008/09 Report Year due to the difficulties in the previous contractual arrangements. The Company advised that as they now have direct management control, then this should afford them greater access to data and more flexibility in implementing changes to the processes and methodologies employed. Indeed, our most recent audits and other anecdotal evidence suggest that the Company is already benefitting from this change.

During the current Report Year we would therefore expect the Company's processes and methodologies to improve further and for NI Water to address any known weaknesses.

NI Water advised of the programme of work they intend to undertake (e.g. DG6, DG7 workshops) and the systems they intend to implement (e.g. a CRM tool), which we believe should all help the Company to improve performance. We propose to report on the progress of these initiatives and improvements in our AIR10 commentaries.

4.1 General

The information to derive DG8 data is supplied from reports produced from the Company's billing records. Summary tables are produced from these records to collate figures for the final table. We reviewed the data in the reports and followed the data trail through to the final table.

During our audit checks the Company provided data to support the figures reported in lines 6 to 12. In reviewing this evidence we found small discrepancies in the audit trail provided (typically less than 1% of the reported data). When challenged NI Water explained that separate reports were run to populate the table and in preparation for the Reporter's audit. The Company explained further that as the reports were run at different times there are small differences in the reports due to changes on individual billing records such as backdated billing corrections or subsequent void identification. We believe these are reasonable explanations and confirm the figures reported in the AIR submission are based on the report run by the Company on the 1 May 2009.

4.2 Performance and Industry Comparison

After taking the number of exclusions reported in line 6 away from the total number of metered accounts reported in line 7, a total of 66,383 accounts are included with the DG8 indicator. The Company state that of this total, 93.2% of customers received a bill based on a meter reading in 2008/09. The reported performance is also below the Company's target for 2008/09 which was 95%.

The percentage of meters not read by the Company for two years equates to 1.3% of the total metered base. We have checked these calculations and confirm that, using the comparable Ofwat DG8 assessment criteria, this would indicate as performance as 'needing improvement' (<98% of company or customer reads and <0.15% unread by the company for 2 years).

4.3 Line 6 – Total metered accounts

As we would anticipate, the number of total metered accounts has increased due to the Company's ongoing non-domestic metering programme and the policy to meter all new properties. Please see our table commentaries for Tables 8 and 7 for further details on these numbers. In our Table 8 audits we are aware that there is currently a backlog of meter installation records to be uploaded onto the billing system. Whilst we have not undertaken any specific checks there is a risk that the number of metered accounts reported in Table 5 may be understated. However, for DG8 purposes it is probable that

these accounts would be excluded as they would be excluded from the DG8 analysis as these properties would be occupied for less than 180 days (6 months).

4.4 Line 7 - Exclusions

During the audit the Company cited a number of examples where an account would be reported in line 7 and excluded from the DG8 indicator. Whilst the Company advised that these have been previously agreed with the Regulator, we discussed a number of these and believe their exclusion from the DG8 indicator appears reasonable. Examples of such accounts include:

- Charged on another basis
- Test meters
- Trade-effluent meters
- DRD or NIW meters
- Fire supplies
- Properties occupied less than six months
- Complex accounts – Including combination meters
- Void properties

Overall, NIW excluded approximately 21% of its metered base from the DG8 indicator. This is somewhat higher than the average of accounts excluded by WaSC's in England and Wales, which is circa 11%. However, whilst providing a useful metric for comparison purposes, it is difficult to make any direct comparisons as NIW DG8 statistics included non-domestic accounts only.

To check the Company's methodology in this area, we asked the Company to provide a list of accounts from each exclusion category. NI Water was able to supply this listing and we selected a random sample of accounts to review. For each account reviewed we sought to check the billing history and consumption records on Rapid to ensure the account was correctly interpreted as an exclusion. In total we reviewed 12 accounts which are broken down as follows:

- 3 void accounts,
- 4 accounts where occupancy is less than 180 days
- 2 new properties (where occupancy is less than 180 days)
- 3 accounts charged on another basis

In all the accounts reviewed the Company was able to demonstrate why these accounts had been excluded. Whilst this represents only a small proportion of the total number of reported exclusions, on the basis of the checks undertaken we are content that the Company's methodology in this area is satisfactory.

We specifically challenged the Company on their interpretation of the 'less than 6 month' category exclusion category. NI Water supplied a number of scenarios which illustrated

their interpretation of this exclusion category in relation to change of occupancy. Whilst these appeared reasonable we have not undertaken any specific checks in this area especially concerning the treatment of accounts of previous occupiers. We will endeavour to undertake further checks in this area in AIR10.

We also questioned the Company on whether they are able to reconcile the number of 'complex' accounts from one report year to the next as under normal circumstances we would expect the types of accounts to remain relatively static over time. NI Water advised that they could not reconcile these accounts between AIR2008 and AIR2009 but would endeavour to undertake an exercise within their AIR10 submission.

4.5 Line 8 and 9 - Company readings/Company or customer readings

To test the Company methodology for these lines we tested a sample of six accounts from the sample provided by NI Water. By reviewing the account history on the billing system we were able to verify that the Company had correctly allocated the account to either line 8 – Company readings or line 9 - Company or customer reads. For each of these accounts we also followed the audit trail to a copy of the bill sent to the customer.

On the basis of this check we therefore believe the Company methodology is in line with their stated practice and with the Reporting Requirements.

4.6 Line 10 - Estimated Bills only

To test the Company methodology for this line we tested a sub sample of three accounts from the sample provided by NI Water. By reviewing the account history on the billing system we were able to verify that the Company had correctly allocated accounts to this line i.e. the bill raised was based on an estimated reading.

To further test the Company methodology we asked the Company to interrogate the billing system to retrieve a copy of the bill sent to the customer. In each case we found the bill issued to the customer was consistent with the account history on the billing system i.e. the bill raised was based on an estimated reading.

4.7 Line 11 - No bills received during the Report Year

The Company report a number of customers who not have received a bill during the year. We checked two accounts and confirm their allocation to this line.

During our checks we noted some accounts where a bill had not been issued during the year because the Company had put a 'stop' on the account. NI Water advised that on occasion activity on accounts can be halted due to a number of instances such as billing disputes. In such cases bills will not be issued to customers. The Company advised that accounts can only be stopped with senior management authorisation however we questioned how these types of accounts are managed and 'un-stopped'. NI Water

advised there are two types of stops, T stops and N stops. NI Water explained further that T stops are temporary and are automatically unstopped after the date specified and a report of all N stops is generated monthly as part of their month end reporting process. This report is reviewed by the Billing and Revenue manager and their Service Provider. We understand decisions are made at this time regarding which N stops are to be removed.

4.8 Line 12 - Unread by the Company for 2 years

To test the Company methodology for populating this line we tested two accounts from the sample provided by NI Water. To check the account had not been read by the Company for 2 years we checked the history of each account on the billing system to check the date of the last reading which was taken (either Company or Customer read). In each case we found that the account had been correctly classified as unread for at least two years.

5. Company Methodology

The primary source of data is the Company's billing system and we confirm that the Company presents all the annual data and that no sampling techniques have been employed.

To confirm the methods used by the Company are as they describe and are in line with the Reporting Requirements, we performed a series of reviews and audit checks. From these checks we are content that the approach adopted is in line with their stated methodology.

On the basis of our audits from AIR09 we have provided a summary of our findings and the Company's methodology below:

- NI Water outsources its' customer contact, billing services and complaint handling to Crystal Alliance. All customer contact is managed centrally by Crystal Alliance.
- The primary source of data is the Company's billing system, Rapid.
- All customers who are eligible for billing are billed, regardless of consumption.
- Before the start of each reading period all meter accounts which need to be read are transferred from the Rapid system onto the Routestar system. These accounts are then transferred onto the PDA's of meter reader who then visits the meter.
- When in the field, all meter readings (including those not able to be read) are input by the meter reader on their PDA.
- Meter readings are uploaded back from the [X] system onto the Rapid on a daily basis. Bills are then generated on Rapid based on the consumption recorded and appropriate tariff.

During the audit, we discussed the management of reading information and the checks to ensure that erroneous or incorrect reads are billed. The Company described the processes by which such readings are managed to the Reporter's satisfaction. When meter readings cannot be obtained the meter reader records this on their PDA and this is fed back into Rapid. On such occasions the Company has a number of strategies to ensure the customer has a bill issued based on a meter reading including asking the customer to submit a reading via the phone or website. If no reading is provided before the subsequent billing run a system estimate is generated and a bill is issued.

6. Company Assumptions

We consider that there are no assumptions to be disclosed and that the data is based on sound procedures.

7. Confidence Grades

The Company has assigned a confidence grade of B2 to lines 6 to 12. Although we have not undertaken any statistical audit tests, we consider that the Company's systems for recording data and producing the necessary reports warrant the confidence grade applied.

We note that there is a risk that the actual number of metered accounts could be under estimated in line 6 due to a backlog in the update of installations being input onto Rapid. Whilst we have not undertaken any specific checks we believe the error should be within the tolerances of the B2 confidence grade applied to this line.

[X]

Date: 10 August 2009

DG9 - Telephone Contact, Lines 13-17**1. Background**

This indicator identifies the ease with which customers can make telephone contact with the Company.

2. Key Findings

- The total number of calls received by the Company during the year is consistent to that reported in the 2007/08 Report Year.
- The number of telephone complaints has increased significantly from those reported in AIR08. The increase is thought to be due to the fact that all telephone contacts which relate to a service failure are classed as telephone complaints.

3. Audit Approach

Our audit consisted of an interview with the NI Water system holders, a review of the current methodology for data collation, an audit of the data provided and a listening exercise to calls received.

We have also checked the data in the final submission for consistency with previously audited data. We have not attempted to reconcile the numbers of calls received to the number of calls logged on the Company's contact management system.

4. Audit Findings

During the year NI Water announced its intention to change the contractual arrangements of the Crystal Alliance consortium, which provides support in customer contact and billing services. We discussed the change in contractual arrangements and the Company advised this would allow NI Water taking direct management control of the core customer service support activities.

This change was effective on the 3 July 2009 and as such the AIR09 submission relates to a period under the previous contractual arrangements. We are aware that a number of known weaknesses identified in previous audits have not been fully addressed in the 2008/09 Report Year due to the difficulties in the previous contractual arrangements. The Company advised that as they now have direct management control, then this should afford them greater access to data and more flexibility in implementing changes to the processes and methodologies employed. Indeed, our most recent audits and other anecdotal evidence suggest that the Company is already benefitting from this change.

During the current Report Year we would therefore expect the Company's processes and methodologies to improve further and for NI Water to address any known weaknesses.

NI Water advised of the programme of work they intend to undertake (e.g. DG6, DG7 workshops) and the systems they intend to implement (e.g. a CRM tool), which we believe should all help the Company to improve performance. We propose to report on the progress of these initiatives and improvements in our AIR10 commentaries.

4.1 General

The Company confirmed that there has been no material change in the methodology for AIR09.

We found that as in previous years, the information is supplied from collation reports produced from the Company's telephony system. Data is extracted directly from this system and summary tables are produced from this system to produce figures for the final table.

Under normal circumstances, a call received from a customer is logged by the telephony system and routed directly to an agent. When all agents are busy, the customers call is placed in a queue until the next available agent is free.

For further details on the call services the Company offers and how these are reported within DG9 please see our commentary in Section 5.

4.2 Line 13 - Calls received

NI Water report that they have received 321,720 calls from customers during the year.

We confirm the total number of calls received is consistent with those reported in the previous year. Overall, the number of calls received has decreased by approximately 0.2%.

4.3 Line 14 - All lines busy

NI Water report that no calls received an all lines busy tone during the year. When questioned on the configuration of the telephony system the Company representative advised that their system has sufficient capacity to ensure customers should never hear an engaged tone.

4.4 Line 15 - Abandoned Calls

The Company report an small increase in the number of calls abandoned. Overall NI Water report 217 more calls were abandoned in 2008/09 than 2007/08. We confirm this equates to 1.1% of all calls received compared to the equivalent figure of 1.0% reported in AIR08.

4.5 Line 16 - Call Handling Satisfaction

During the audit the Company outlined that they has provided data to the market researcher for each of the four designated weeks (waves).

We questioned the Company if any of the four data waves were in weeks which were consider atypical for any reason e.g. problems with the telephony system, operational incidents etc. The Company explained that they did not consider any of the four waves to be atypical.

The Company briefly explained the process by which the call data is collated prior to dispatch to the market researcher. All calls are passed to the market researcher and no exclusions are made.

In our experience elsewhere, Company's do make a number of small exclusions to the data provided to the market researcher. The possible circumstances where this occurs include

- Calls (mainly operational) that can be identified as "non-customer" calls (e.g. from field staff or contractors).
- Customers who have ex directory phone numbers.
- From customers sharing the same number (e.g. switchboard).
- If there is a "do not phone" indicator on the account.
- Calls from key customers.

4.6 Line 17 - Telephone Complaints

In the Company's draft submission we noted that the reported number of telephone complaints had increased significantly. We found that the overall the number of telephone complaints has increased by approximately 74,000 complaints which is equivalent to over a three fold increase in the number of complaints received by telephone. We queried this increase and the Company explained that the figure within the draft submission was incorrect and the correct figure was 35,437. However, in checking the Company's final submission 33,102 complaints were reported. In the time available we have not be able to verify the correct figure and subsequently have concerns regarding the accuracy of the data reported.

During the listening exercise we undertook we reviewed one call regarding low pressure was not categorised as a complaint on the Company's system. We challenged this as our opinion was that this was a complaint about the standard of service offered. The Company concurred and outlined that this would be reported as a telephone complaint in Table 5 as the Company use the CMS coding to define a complaint rather than the listing on the contact system.

4.7 Audit Checks

During our visit to the customer contact centre we undertook a listening exercise to a number of calls being received at the time of our visit. During the audit we reviewed approximately 6 calls which included both inbound and outgoing calls. On the basis of the checks carried out we believe the Company's methodology and recording of these calls is sound. A summary of our audit findings are detailed below:

- One call related to a customer chasing a response to a previous call which related to an operational issue. Whilst the Agent was unable to answer the query at the time of the customer's call the agent was able to raise it with a manager who was able to provide a response. The call was closed out with the Agent returning the customers call and updating the notes on the call log.
- One call related to a caller requesting to be transferred to a NI Water staff member. Whilst this is not a true customer call regarding a call about service or billing matters it would be recorded within the total contacts received line. We have not done any checks to quantify the potential impact of this.
- We reviewed one call regarding low pressure was not categorised as a complaint on the Company's system. We challenged this as our opinion was that this was a complaint about the standard of service offered. The Company concurred and outlined that this would be reported as a telephone complaint in Table 5 as the Company use the CMS coding to define a complaint rather than the listing on the contact system.

We also asked NI Water for clarification on the 4,287 calls cited in their commentary which had been rejected by the Company's system either because there were no agents with the correct skill set or the maximum queue time was exceeded. We queried how these calls should be allocated and whether such calls should be classed as 'all lines busy' as from the customers perspective they do not reach an agent. NI Water advised that the rejected calls identified during the audit related to debt, billing and new connection calls received out of hours and not related to calls rejected due to the capacity or operation of their call centre. On the basis of the Company's explanation we are content that the Company's treatment of rejected calls is sound.

5. Company Methodology

5.1 Overview

The Company's commentary describes the configuration of its telephony system. NI Water has also identified the telephone numbers and locations against which they are reporting in their Methodology Statement. The volume of each calls received on each line is taken directly from Call Media reports.

In summary:

- For Customer Billing the office hours are 8am to 8pm Monday to Friday, and 8am to 6pm Saturday.
- The Company's debt line office hours are 9am and 5pm weekdays only.
- For Service Enquiries, NI Water's Waterline and Leakline are open 24 hours a day 365 days a year
- Calls received outside of these advertised times are not included in the report of calls received or calls abandoned.
- NI Water has not utilised any temporary customer contact points during the year.
- No message manager systems or answering machine facilities were used during the reporting year.

Within their commentaries, NI Water cite a number of instances where their methodology is not considered to be in line with the reporting guidance. We have reviewed these on a cursory basis but did question the Company on the issue associated with rejected calls and the 'Type Talk' line. We questioned NI Water how many calls are received on this line and they advised that no calls were received and they expect minimal use of this line in the future. Based on this explanation we are content that this exclusion will have an immaterial effect on the reported DG9 statistics.

5.2 Call Services offered/telephony configuration.

During the audit we questioned the Company on the call services it offered in terms of IVR, TouchTone, Queuing or automated speech recognition facilities as we are aware from other experience that calls via such services are often difficult to track and report. In response NI Water advised that their telephony system does not offer such services. We understand that the only option presented when callers contact the 'Waterline' number is to opt for new connections or to hold for all other enquiries.

5.3 Quality Assurance

During our audit work we queried what QA controls NI Water operates on the calls received. The Company outlined the various controls in place including the administration of the Crystal Alliance contract and the performance checks undertaken by the Customer Service office.

We specifically reviewed the performance checks undertaken by the performance team and believe the checks undertaken to test the quality of the service are soundly based. The activities undertaken by the customer service office include the monitoring of live telephone calls and the review of selected responses to correspondence to test. The Company explained how feedback is disseminated back to the agents and whilst the sample sizes are relatively small we also believe that the checks undertaken should help drive further improvements. NI Water advised that they intend to implement further checks of this type during the year.

5.4 Reporting

NI Water advised that the telephony system is configured to produce data required by the Reporting Requirements. As such data is provided for the total number of calls received, calls abandoned, all lines busy and telephone complaints directly from the system itself. We have not undertaken any checks of the configuration of these reports.

During the audit we also met with staff whose responsibility it is to report DG9 and other management information. The Company has a documented methodology of how data is collated from the system and during the audit the representatives outlined the processes they follow.

We have checked and confirm that the totals presented in the DG9 lines of Table 5 are consistent with the summary Call Media reports compiled by the Company. We challenged the Company on the content of one report which related to the distinction between calls abandoned and calls rejected calls. NI Water advised that rejected calls reported within Call Media relate to calls received outside of office hours.

5.5 Telephone Complaints

As highlighted above, the Company use contact type rather than complaint flag on Call Media to report telephone complaints.

5.6 Call Handling Satisfaction

We found that the Company reports all calls received the market researcher as no exclusions are made. As such it is possible that allowable exclusions are included in the market researchers' sample in each of the four designated weeks.

6. Company Assumptions

We believe that all relevant and material assumptions have been disclosed above by either the Company or the Reporter.

7. Confidence Grades

We believe the confidence grades assigned to lines 13 to 17 are appropriate but have not undertaken any specific or statistically significant checks to verify the volume of calls reported. However, prior to the finalisation of our commentaries we noted a discrepancy in the number of telephone complaints and have some reservations on the accuracy of the data reported. We therefore recommend that the B3 confidence grade assigned to this line is downgraded.

Date: 10 August 2009

Special Needs Register - line 18**1. Background**

This table identifies customers registered for special assistance.

Within their commentaries, NIW explain that its Priority Service scheme was launched during the latter part of the Report Year and that no customers were registered on the scheme at the end of the year. As such we have not reviewed this element of the Company's return. However, we understand that during the current year customers have been registered on the scheme and as such this element must be reviewed in future years.

Date: 10 August 2009

Table 5a – DG7 Response to Written Complaints (complaints data for CCNI)**Commentary by REPORTER****1. Background**

This table summarises written complaints received by a company into 5 complaint categories defined by the Consumer Council.

2. Key Findings

- The breakdown of complaints reported by the Company is consistent with the complaint volumes reported in Table 5.
- We have tested the Company's allocation of complaints to the various complaint categories and believe NI Water's methodology is satisfactory. However, there is a risk of misclassification as opening CMS codings are used rather than closed (post investigative) codings.
- We note an inconsistency in the confidence grading between DG7 and Table 5a.

3. Audit Approach

The audit involved an examination of the procedures adopted by NI Water for its customer service activities regarding customer complaints. Whilst the main focus of our audits has been on the work systems and practices used by the Company in preparing data for Table 5, we have carried out a cursory inspection of the methodologies used to populate Table 5a.

4. Audit Findings**4.1 General**

During the audit, we discussed with the Company their methodology for completing this requirement. The Company explained that as for the DG7 measure, they extract data from their Rapid system.

4.2 Total written complaints - lines 1 to 3

We confirm the source of these lines is Table 5 lines 1, 2 and 4. Please see our DG7 commentary for the derivation of these lines.

We also confirm that the data reported in Table 5a is consistent with that reported in Table 5.

4.3 Category of written complaints – lines 4 to 13

Allocation to category

During the audit the Company explained that as each complaint is logged it is allocated to a category. The Company is then able to classify all complaints into the high level headings cited in the Reporting Requirements. Classification has been based on the coding when a complaint is received rather than when the complaint is closed. Using this methodology there is a risk that contacts could be misclassified as evidence gained during the investigation could facilitate a more accurate assessment of the correct classification. We have not sought to investigate this but during the audit we tested the Company's allocation of complaints into the various headings. In each case reviewed we found that all of the complaints checked had been categorised correctly and in line with the Reporting Requirements. On the basis of this check we therefore believe the Company methodology in this area to be satisfactory but we note the potential for misclassification.

We confirm the addition of lines 4, 6, 8, 10 and 12 equal the number of complaints reported in line 1.

Allocation to Stage

In our review of DG7 we reviewed a number of complaints and we saw evidence of complaints being logged at various stages. We undertook cursory inspections to verify the stage of a number of complaints reviewed and in each of these cases we concurred with the Company's view. However, in the time available, we have not performed a detailed review of each complaint history to fully verify the Company's methodology for stage allocation.

5. Company Methodology

The Company methodology is similar to that it employs for DG7 – written complaints.

In essence, the Company interrogates its Rapid system to extract the required data to populate the table. During our audits of DG7 we reviewed the Company's processes for dealing with written complaints, including the operation of this system. Please see our Table 5 commentaries for further details.

From discussions with the Company and checks carried out we believe the methods used by the Company are as described in their methodologies. CMS codes are used to allocate complaints to a particular category.

6. Company Assumptions

We believe all assumptions have been reported.

7. Confidence Grades

For lines 1 to 3 – “total written complaints”, data is copied directly from Table 5 we expect the confidence grade to be consistent with that reported within this table. We therefore believe a grade B4 is appropriate.

Please see our commentary on Table 5 on the appropriateness of the confidence grades assigned to these lines.

For lines 4 to 13 – “Category of written complaint”, the majority of data is extracted directly from Rapid and therefore the Company methodology does not rely on sampling or extrapolation to populate the table. Whilst a B2 grade appears reasonable we have not carried out any detailed checks on the Company’s procedures.

Date: 10 August 2009