

**Part B6 – Customer Service Strategy and Service Enhancements
(Consumers' Views)****Summary Report by REPORTER****Summary of Audit Findings & Reporter Opinion****Customer research**

In Section B6.1 Thames Water describes its customer service strategy. The Company has engaged in a comprehensive programme of research and consultation into consumer and stakeholder views since 2007 with the express purpose of informing the SDS, the DBP and the FBP. The research has combined both qualitative and quantitative approaches which have been undertaken by recognised independent organisations with strong credentials for this type of work. The individual research projects and consultation exercises and their chronology are explained in C1.

The Company provides an overview of the consumer research that has been undertaken to inform the SDS and FBP and presents the conclusions from C1 and marginal WTP results from the residential survey. We are not required to comment on the Customer Survey Methodology but have confirmed it was professionally undertaken and the key studies were subject to peer review. There is evidence in the C1 submission that the peer reviewers have critically examined the methodologies and findings of the studies and have made observations/ recommendations on key points as appropriate.

(Text redacted)

AMP4 & AMP5 targets

In Part B6 Thames summarises the performance in AMP4 and compares customer service performance measures for 2007/08 actual performance with 2009/10 forecast and the 2009/10 FD04 Target. It should be noted that at the time of the FBP audit this table was still in preparation and was not available for review and discussion. The observations made below were made after the audit with written requests made to the Company for clarification. Despite this, we have still been able to fulfil our audit requirements with respect to this section of the FBP.

We have reproduced in the table the Companies AMP4 forecast performance and targets and have added in the 'output 2014/15' column for ease of comparison (data from Thames Water's section 6.1.3). This illustrates that for the majority of the service measures Thames are set to achieve the AMP4 targets. The exceptions being DG5 properties flooded due to causes other than hydraulic overload (already discussed between Thames and Ofwat) and DG8 bills based on meter readings which is forecast at 99.5% against a target

of 99.7%. Thames provides an explanation for this in section B6.1.3 which refers to a reference level for DG8 performance bounded by upper and lower control limits. The 2009/10 forecast is in line with the 2014/15 forecast and hence no deterioration in service is expected.

Performance Measure	Units	Performance				
		2007/08 Actual	2008/09 Forecast	2009/10 Forecast	2009/10 FD04 Target	Output 2014/15
Customer Service						
DG2 Properties below reference level for low pressure	No.	349	75	75	2,455	75
DG3 Interruptions to supply – overall performance score	Score	0.24	0.41	0.35	0.35	0.31
DG4 Restrictions on water supply – population affected	%	0	0	In line with levels of service	<i>Not specified</i>	89%
DG5 Properties flooded due to hydraulic overload ^{Note 2}						
Internal flooding	No.	234	167	204	<i>Not specified</i>	189
External flooding		427	529	546		
DG5 Properties flooded due to other causes in the year						
Internal flooding	No.	1,020	960	775	673	625
External flooding		5,209	5,000	5,000	3,919	4,753
DG6 Billing contacts responded to within 5 days	%	99.8	99.9	99.85	99.2	99.85
DG7 Written complaints responded to within 10 days	%	99.6	99.6	99.60	99.6	99.60
DG8 Bills based on a meter reading	%	99.6	99.7	99.50	99.7	99.50
DG9 Telephone calls abandoned	%	7.3	7.5	7.5	4.0	7.5
Water Service						
Security of supply index (WRP06 basis)	No.	89	55 ^{Note 4}	100 ^{Note 4}	85 ^{Note 4}	96
Leakage	MI/d	713	715	685	685 ^{Note 5}	652
Number of burst mains ^{Note 6}	No.	10,729	14,163	11,473	<i>Not specified</i>	<i>Not specified</i>
Water quality – mean zonal compliance	%	99.98	99.99	99.98	<i>Not</i>	<i>Not specified</i>

		<i>specified</i>				
Serviceability assessments:						
Water infrastructure		Stable	Stable	Stable	Stable	Stable
Water non-infrastructure		Stable	Stable	Stable	Stable	Stable
Performance Measure	Units	Performance				
		2007/08 Actual	2008/09 Forecast	2009/10 Forecast	2009/10 FD04 Target	Output 2014/15
Sewerage Service						
Pollution incidents – Category 1, 2 and 3 ^{Note 7}		No.	197	220	210	<i>Not specified</i>
Sewer collapses		No.	465	400	498	<i>Not specified</i>
Sewer flooding – reduction of properties at risk of flooding						
Hydraulic overload (internal at least once in 10 years)		No.	2,078	2,428	3,088	2,379
Other causes (internal)		No.	663	940	1,380	1,311
Sewage works discharge quality:						
Compliance with consents						
Population equivalent served by compliant works (LUT)		%	99.72	99.14	98.88	98.7
		%	100	99.92	99.83	100
Serviceability assessments:						
Sewerage infrastructure			Stable	Stable	Stable	Stable
Sewerage non-infrastructure			Marginal	Stable	Stable	Stable

The AMP5 targets are generally consistent with the AMP4 targets and forecasts with the exceptions of DG5 (external sewer flooding) and DG8. The lower AMP5 target for DG8 is explained in Thames' submission and is a mid way figure between average performance to date and the AMP4 target. A lower AMP5 target for external sewer flooding is less clearly defined.

Customer's priorities

It is recognised that Thames has undertaken a considerable amount of customer research on priorities for AMP5 and associated willingness to pay for improvements. In examining the Company's proposed AMP5 targets, stated above, we have attempted to match customer stated priorities for improved levels of service against them or other associated elements of the FBP. For example, biological and chemical quality of tap water "was seen by the vast majority of participants as the most important of all attributes". And yet there is

no specific performance measure against which this can be evaluated. There is however mention made in B6.1.3 of the installation of new treatment processes at 11 sites with three further schemes to protect water quality; Thames states that this has the supported of the DWI. In response to a challenge on this Thames referred to Section B6.1.3 page 47 which states “*it is essential that we sustain this performance by continuing to maintain our assets. Customers should not see any deterioration in AMP5 and some customers will see localised improvements in discolouration, taste and odour*”. This point is also addressed in section ‘B4 Quality Water’.

Internal sewer flooding (other causes)

A second example is that of internal sewer flooding, where it “*was agreed by the majority of participants that this was one of the highest priority areas for Thames Water and was seen as the least acceptable*”. The associated DG5 target for AMP4 (for properties flooded due to other causes than hydraulic overload) is 673 properties; this is reduced by just 48 properties in the proposed AMP5 target of 625 properties. This target does not appear to correspond with the stated priority of customers for investment.

Internal sewer flooding (hydraulic programme)

The supporting text in section B6.1.3 mentions a continued focus on reducing the number of properties at risk of internal flooding and the development of two large catchments schemes in AMP5. The text does not give any insight into the level of investment or rationale for why it appears to be lower than in AMP4 which would appear to be contrary to customer preferences and expectations. Thames reported that the detailed response to this is included in B6 Sewer Flooding and is not repeated here.

Leakage

A third example is that of leakage where the view from customers was that the current level of leakage was unacceptable and was seen to undermine the value of the other proposals by the company. The work by an independent agency, confirms this view stating that “*reducing leakage, maintaining current levels of safety and meeting future demand – were customers’ leading investment priorities*”. The text in B6.1.3 mentions that Thames will reduce leakage from 688MI/d to 527MI/d between 2010 and 2020. The data in Table B5.1 indicates in the AMP5 period a reduction of 36MI/d from 688MI/d in 2009/10 to 652MI/d in 2014/15; the remaining reduction of 125MI/d being left for the AMP6 period. The Company does not explain in section B6 its rationale for the proposed profile for leakage reduction which is potentially at odds with the customer research and expectations. Thames responded to this challenge in detail (the full response is presented in Appendix A to this commentary) with an explanation of key assumptions regarding climate change. Thames reports that it has “*agreed with Ofwat to defer the decision on funding the final three years of our leakage reduction programme until the UKCP09 climate change scenarios are published. Our final business plan targets therefore reflect only*

the two-year programme of leakage activity". This is not explicitly stated in the B6 Company submission and explains an apparent discrepancy between customer expectations against what is proposed in the FBP.

Support for proposed bill increase

Thames reports in B6 the findings from the customer research presented in C1. Regarding the WTP for the draft business plan, Thames reported in the draft of the FBP, that was subject to audit, the range as being from £54 to £68 per household per year. This was subsequently corrected by the Company and reported as £53 to £68; this is consistent with the values reported in C1 and Part A.

B6 (page 18) also states that there is a payment of £26 per year per household to maintain the current service level; in the draft of the FBP that was subject to audit this value was given as £12 per year per household. When challenged on the source of this value Thames responded that it was derived from the financial modelling bill impact analysis. Thames provided further clarification regarding the linkages to C8 and CBA and that an internal audit trail was available for this value. Thames indicated that the financial auditors may have audited this element of the FBP but no evidence of this was provided. This challenge remains unresolved and we suggest it is followed post submission.

Regarding why the value has changed from £12 in the DBP to £26 in the FBP, Thames made reference to the introductory text in B6 which outlines the key changes between the two submissions. On page 5 of B6 Thames states that it has made key changes in its FBP which enables them to "*maintain the same average bill increase in price terms which customers continue to support and still deliver the customer service performance outputs in line with the draft Plan.*"

Furthermore, it should be noted that in none of the customer research were respondents asked specifically about willingness to pay more for maintaining the status quo.(text redacted) The inference from the Customer preference survey is that apart from inflation there are no additional costs associated with maintaining current service levels. Customers were only invited to give their views on improvements or deterioration in levels of service and associated changes in bills.

Thames' response on this point was that they undertook 2 studies that could have addressed this issue and it is the second that is more relevant, as this reviews acceptability of the plan. In this second study Thames did acknowledge that there would be a bill impact for maintaining service, above inflation, and comment that the bill impact of the plan is within the range described. Thus, the draft business plan study collected willingness to pay for the enhancements part of the plan but was explicit that there was an increase

in bills associated with maintaining service. The conclusion that Thames drew from the modelling was that the value placed on this had no impact on willingness to pay for the enhancements, suggesting that customers are willing to pay for maintaining service regardless of the cost.

(TEXT REDACTED)

The summary of section B6.1.3 states that “*the investment required to deliver this plan will result in an increase of 16.7% in average bill It is also lower than the 25% increase that customers’ have told us they are willing to pay.*” In challenging the Company on the source of these values Thames made reference to figures being derived from the research report. It should also be noted that the version of B6 that was formally issued to OFWAT as part of the FBP on the 7th April contained the value of 16.7%. In reviewing the Part A submission of the FBP we noted that the equivalent value quoted there was 17.2%. When we asked Thames for an explanation it transpired that Part A had been amended to reflect a late change in opex numbers and this change had in error not been reflected in B6. Thames confirmed that the value should be 17.2% for consistency with Part A.

In Part A of the FBP the proposed increases are shown increasing from a value of £283 in 2009/10 to £331 in 2014/15; i.e. an increase of £48 which is an increase of 17.2% (with rounding). In B6 (page 19) the bill impact is reported as £49 per household in total, made up from £26 for maintaining current services and £23 for the enhancement in the FBP. The difference in reporting (i.e. £48 in Part A and £49 in B6 is attributed to rounding errors). As noted above, regarding the source and verification of the bill impact of £26 per household to maintain current levels of service, the total bill impact of £48 per household was also not subject to audit as part of the B6 work stream.

In clarifying with the Company what was included or excluded from the proposed average increase in household bills of £48 by 2014/15 it was confirmed that:

- This was the total bill impact and included the earlier stated £26 to maintain current levels of service;
- It excluded inflation to be consistent with the framework for price increases used by OFWAT; and
- That the increase would be graduated over the AMP5 period with 62% of the increase (i.e. £30) being the increase in the first year.

Affordability

Regarding affordability, Thames Water refers to its affordability initiative that it is developing, to support those customers that genuinely find it difficult to meet the costs of their water and waste water bills. This initiative has been completed at a high level development regarding the affordability strategy.

Audit Scope

The Ofwat guidance to the Company for Section B6.1 is as follows:

“The Company’s overall consumer service strategy should be described i.e. does the Company intend simply to maintain the service levels reached by 2010 or does it envisage changes in service levels and in which areas of service. The Company should explain how this relates to its broad understanding of consumers’ views and priorities.

Each Company should describe (with appropriate cross references to tables A2 and A3) its expectations in respect of the main DG indicators and such other elements of consumer service as it wishes to include eg policy on compensation and customer charters”

There is no specific guidance for the Reporter regarding section B6.1 consequently our audit focussed on examining the methodology by which Thames Water had developed its strategy and in particular seeking evidence on how customers’ views had been used to set priorities and how these had been taken through into the FBP.

Reporter Engagement & Scope of Audit

This commentary is based on the Final Company commentary for B6.1 provided on 27 March 2009. This commentary does not cover Sections 2 (Water Service) and 3 (Sewerage Service) of the Customer Service Strategy contained in B6 as these are addressed elsewhere.

An audit of the Customer Service Strategy for the DBP was held on 27 June 2008. For the FBP an audit was held on 9th March 2009. At this audit a draft of the FBP submission was made available but sections relating to the DG5 targets had not yet been completed as they were still under review by the Company. Consequently once the final text was received further challenges were made.

At audit it was ascertained that there was a named director assigned overall responsibility for the section B6 submission. As a final version had yet to be issued at the time of audit there was no evidence available of any internal checks or controls. However, the process by which this was to be checked and approved was explained.

In the absence of specific Reporter Guidance for Section B6.1 we have focussed on the Company’s guidance and checked compliance with that.

Summary of Thames Water Water’s Proposals

TW's submission for B6 Customer Services is complete & consistent with the SDS. Policy on compensation and customer charters are now included. The DG indicators proposed for AMP5 are also included.

Summary of Audit & Review

The Company has been proactive in engaging with the Reporting team and responded positively to questions and observation.

Areas for Refinement post FBP

Thames to review and reassess the leakage programme in year 2 of the AMP5 period in light of the UKCP09 climate change scenarios: the FBP submitted to OFWAT only reflects a two-year leakage programme at the commencement of AMP5.

Date: 17 April 2009
Prepared By: HMS
Version: Final

Appendix A

Reporter Challenge on B6 and Company Response

Response to Reporter comments in B6

A third example is that of leakage where the view from customers was that the current level of leakage was unacceptable and was seen to undermine the value of the other proposals by the company. The work by an independent agency confirms this view stating that “reducing leakage, maintaining current levels of safety and meeting future demand – were customers’ leading investment priorities”. The text in B6.1.3 mentions that Thames will reduce leakage from 688MI/d to 527MI/d between 2010 and 2020. The data in Table B5.1 indicates in the AMP5 period a reduction of 36MI/d from 688MI/d in 2009/10 to 652MI/d in 2014/15; the remaining reduction of 125MI/d being left for the AMP6 period.

Company response

Overview

- The Reporter has misunderstood our leakage reduction programme
- Our programme meets customer expectations on leakage reduction, achieving industry average levels by 2020.
- Our intention (as published in our Statement of Response) is to reduce leakage by 6 MI/d more by 2020 than in our draft plan.
- The need, and therefore the economic justification for leakage reduction is to some extent linked to our assumptions on climate change. We have agreed with Ofwat to defer the decision on funding the final three years of our leakage reduction programme until the UKCP09 climate change scenarios are published. Our final business plan targets therefore reflect only the two-year programme of leakage activity.

Approach to climate change

One of the most significant drivers for investment in our revised draft Plan is the forecast impact of climate change on both water available for use and the demand for water. Even for the early stages of the 25-year plan the impacts of climate change are highly significant. We have used UKCIP2002 scenarios as the basis for assessing these impacts, and intend to update the assessment when the information from UKCP2009 becomes available. Whilst we do not expect that this update will materially impact on our plan, we do recognise that future investment should be determined using the most up to date information.

Thus in response to Ofwat guidance on climate change set out in PR09/20 – we have removed a significant proportion of climate change driven investment from our final plan in acknowledgement that UKCIP will publish an updated set of climate change scenarios later this year. However, we firmly believe that the revised scenarios, when published, will support the requirement for substantial additional investment.

Consequently, our Final Business Plan (FBP) submission only includes investment costs and outputs for the first two years of the planning period (2010/11 and 2011/12) for those activities for which inclusion in the plan is partially or entirely driven by climate change. For the remaining three years of AMP5 we have deferred the decision to include elements of the plan driven by climate change pending the update from the UKCP2009 findings. We intend to submit an update of our plan based on UKCP2009 climate change scenarios within the AMP5 period to justify the investment required for the last three years of the five-year period. We discussed this approach with Ofwat at our company meeting in January 2009.

Leakage Strategy as presented in revised Water Resources Management Plan

London WRZ

As presented in the dWRMP, in restoring the supply demand balance, we place highest priority on leakage reduction, which is in line with our customers' preferences and our aspirations as set out in our Strategic Direction Statement. Consequently, programme selection is based on the sustainable economic level of leakage (SELL), as opposed to the traditional strict least cost monetary economic level of leakage (ELL).

It should be noted that significant ongoing detection and repair activity is required just to hold leakage at a constant rate, due to the poor condition of the network. To prevent further deterioration of the network, a capital maintenance programme is required to replace those mains in the worst condition (as determined by the number of bursts over a period of time). The amount of capital maintenance activity required to maintain asset performance and thus leakage levels is dependent on the size of the growth mains replacement programme employed to reduce leakage. This is because this growth programme will replace areas of network in the poorest condition and thus prevent further deterioration in the condition of these mains.

The leakage programme has been reviewed in light of the revised supply demand deficit. The latest data from the ongoing mains replacement programme has identified increased leakage savings per kilometer; these can in the majority be attributed to the successful application of *Leakfrog* technology to reduce residual customer side leakage. Assessments of the

savings are evaluated as 0.08 MI/d per km compared to 0.05 MI/d per km assumed in the original dWRMP.

The revised AMP5 mains replacement growth programme is now 1000km, in comparison to 2000km in the original draft. The total amount of network that will be replaced in the future includes the capital maintenance programme. In response to the revised dWRMP, the capital maintenance mains replacement programme will now need to increase over AMP5 with 870km of mains replacement.

The mains replacement programme will be delivered in combination with enhanced Active Leakage Control (ALC) consisting of pressure management, zonal reconfiguration, increased find and fix; and additional enabling activity e.g. improvements to DMAs by installing additional meters to measure distribution leakage.

The AMP6 programme has been increased from 1500km of mains replacement to 2000km. Associated capital maintenance will be around 475km company-wide.

The total mains replacement programme for AMP5 and 6 is 3000km for mains replacement (compared to 3500km in dWRMP) and including capital maintenance is 4572km (compared to 4450km in dWRMP).

Given this mains replacement programme, we estimate that by the end of AMP6 the overall leakage savings will result in a leakage level of 406 MI/d or 133 l/prop/day. This compares with 412 MI/d and 134 l/prop/day given in the original dWRMP.

Figure 1 below plots the revised programme of leakage reduction in London against the original plan. It can be seen that leakage levels under the revised leakage strategy are similar to those given in the original dWRMP over the course of the planning period but are higher during AMP5.

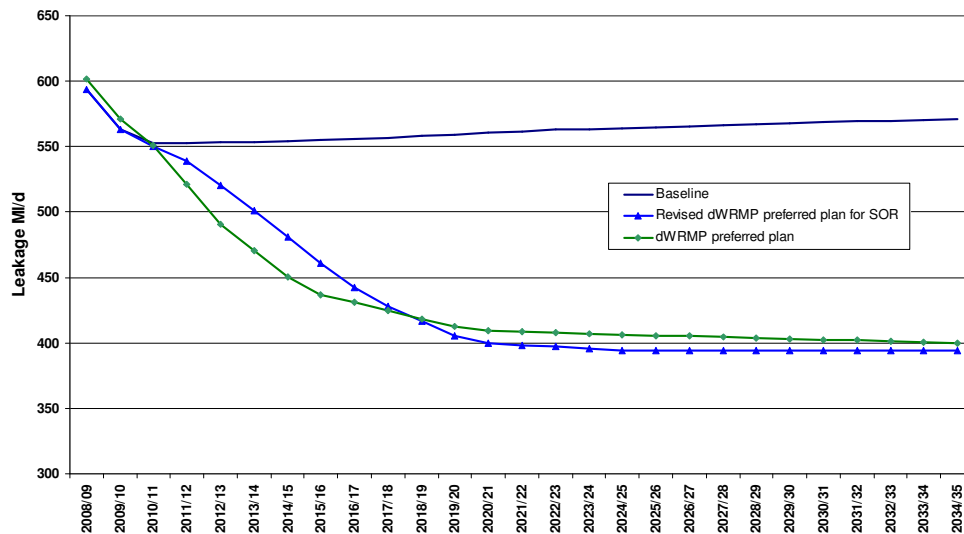


Figure 1: Comparison of target leakage levels - London

SWOX WRZ

In AMP5 the savings from this strategy are 3.3MI/d from Enhanced ALC and 1.2 MI/d of CSL from metering. This leakage programme was the only viable one that would maintain leakage levels over AMP5; expenditure above these levels is not justified by the resulting benefits and is increasingly higher risk. Note that without the proposed investment leakage in SWOX would increase by about 6 MI/d over the planning period due to the contribution from new properties and increased length in the overall network.

In AMP6 there will be a small saving from enhanced ALC and further savings (1.2 MI/d) through the reduction of CSL associated with metering. From AMP7 to AMP9 there will be continued savings from the enhanced ALC programme to offset an increase in leakage from new properties.

Leakage programme in the final Business Plan

To reflect the approach agreed with Ofwat to mitigate the uncertainty around funding investment linked to climate change, we have not submitted the final three years of leakage capex investment (mains replacement and enhanced ALC) in our Final Business Plan.

Our Final Business Plan submission for supply demand water therefore includes only 400km of mains replacement profiled over two years. The enhanced ALC capex programme (including pressure management, zonal reconfiguration, trunk mains leakage) has also to be curtailed at the first two years. Table 60 below gives the programme of leakage activity assumed in our Final Business Plan.

Leakage Targets and ELL

The leakage targets associated with our leakage reduction programme are shown in the two tables below.

Table 1: Annual Average Leakage Targets by WRZ (MI/d) (Table 10b Equivalent) – revised dWRMP

Area	End AMP4	End AMP5	End AMP6	End AMP7	End AMP8	End AMP9
	2009/10	2014/15	2019/20	2024/25	2029/30	2034/35
London*	563	481	406	394	394	394
Thames Valley	125	121	121	120	120	120
TWUL	688**	602	527	514	514	514

*The leakage values reported in the Water Resources Plan Tables are Table 10b equivalent and are 4MI/d higher than the Table 10 equivalent numbers for London.

**Equivalent to 685 table 10 equivalent

Table 2: Annual Average Leakage Targets by WRZ (l/prop/day) (Table 10b Equivalent) – revised dWRMP

Area	End AMP4	End AMP5	End AMP6	End AMP7	End AMP8	End AMP9
	2009/10	2014/15	2019/20	2024/25	2029/30	2034/35
London	190	160	132	122	117	113
Thames Valley	204	168	133	123	118	114
TWUL	146	135	127	119	114	110

These targets form part of sustainable least cost plan over AMP5 when taking into account the full externalities of leakage reduction including customers' willingness to pay.

Table 3: Average Leakage Targets by WRZ (MI/d) (Table 10b Equivalent) – Final Business Plan

Area	End AMP4	AMP5				
	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
London*	563	550	539	531	531	531
Thames Valley	125	122	121	121	121	121
TWUL	688	672	660	652**	652	652

*The leakage values reported in the Water Resources Plan Tables are Table 10b equivalent and are 4Ml/d higher than the Table 10 equivalent numbers for London.

**Target includes leakage annual average savings from mains replacement completed in the previous year

Table 4: Annual Average Leakage Targets by WRZ (l/prop/day) (Table 10b Equivalent) - Final Business Plan

Area	End AMP4	AMP5				
	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
London	204	198	193	189	187	186
Thames Valley	146	142	140	138	137	135
TWUL	190	185	180	177	175	174

Further detail on our leakage strategy is provided in sections B5 and C4.