Regional Labour Costs Cost Adjustment Claim

09/06/23

June 2023





Cost Adjustment Claim: Regional Labour Costs

Name of claim	Regional labour costs
Business Plan Tables where botex claim is reported	CW18
	CVVVV18
Price control the claim relates to	WN+
	WWN+
Total gross value of claim for AMP8	WN+: £277m
	WWN+: £691m
Total implicit value of claim for AMP8	WN+: £255m
	WWN+: £625m
Total net value of claim for AMP8	WN+: £22m
	WWN+: £66m
Materiality for relevant price controls	WN+: £20m
	WWN+:£28m
DPC?	No

What is the claim for?

Our claim relates to the higher costs of labour in the South East region compared to other regions. Data from the Office of National Statistics (ONS) Annual Survey of Hourly Earnings (ASHE) shows compelling evidence that manufacturing wages (Ofwat's benchmark for the water sector) in the South East are significantly above the national average (Chart 1). Across the 2011-2022 period, the ONS data shows that manufacturing wages in the South East are 11% above the national average (see Table 1).

Ofwat said in its April 2023 base cost models consultation that it considers the inclusion of population density as a cost driver in its econometric models to account for the effect of regional wage differentials. Ofwat's assumption is that regional wage and population density are highly correlated. Our analysis demonstrates that manufacturing regional wages (based on ONS data) are poorly correlated with the regional density metrics that Ofwat is proposing for PR24 (see Tables 2 and 3). This means that population density is not a good substitute for regional wages in Ofwat's cost models and will provide an insufficient allowance to accommodate the above-average wages that we face in the South East.

Our claim is for a modelling adjustment to allow a sufficient cost allowance for operating in a region with high labour costs which are not mitigated by the population density factor.

Test	Brief summary of evidence to support claim
Need for cost adjustment	Labour is the most material input used by water companies, which Ofwat estimates at 38.6% of wholesale costs. The impact of high regional wages is not reflected in Ofwat's assessment of botex requirements for companies operating in the South East due to the low correlation between manufacturing wages (Ofwat's benchmarking for the water sector) and population density.
Uniqueness	We operate within the South East of England which has the second highest regional manufacturing wages and these are poorly correlated with the metrics of population density that Ofwat claims accounting for regional wage differences in the econometric models.
Management Control	The regional cost of labour is, to a large extent, outside management control. We have employed management strategies to mitigate some of the regional wage impacts where practicable.
Materiality	The claim is material at 1.1% for WN+ and 2.4% for WWN+ of totex allowances.
Adjustment to allowances	Our claim covers the additional funding required to accommodate the higher regional wages in our area than the national average, according to ONS ASHE data. The urban density factor only partially mitigates this higher regional labour costs as manufacturing wages are poorly correlated with the three metrics of population density that Ofwat proposes to use at PR24 in water (correlations ranging from 0.42 to 0.49) and wastewater (0.50 to 0.59).
Cost Efficient	Comparative benchmarking, using data from ONS collected through ASHE shows compelling evidence that manufacturing wages in the South East are significantly higher than the national average. Our HR strategy has been to maximise cost efficient and cost effective solutions, but not at the expense of customer service. We have made an adjustment of 20% to our claim to reflect management control over the location of some functions whilst maintaining customer performance. While acknowledging the role of management control, ONS ASHE data generally represents a cost efficient level for wages since Southern Water will have difficulty attracting and maintaining staff if the wages it offers are below that offered by a typical competitor employer.
Need for Investment	Not Applicable

Best option for customersNot ApplicableCustomer ProtectionNot Applicable

Need for Adjustment

1.1 Why does Southern Water require an adjustment to account for higher wages?

We operate within the South East of England which has the second highest regional manufacturing wages. These are poorly correlated with the metrics of population density that Ofwat claims account for regional wage differences in the water and wastewater econometric models.

At PR19, Ofwat established that manufacturing wage is the most appropriate benchmark for the water sector wages and used this benchmark to set a real price effect for wage rates based on hourly gross pay for full time workers and excluding overtime. Ofwat said at PR19:

"Manufacturing is an appropriate benchmark for a true up as manufacturing and water sector labour markets are similar and often involve similar skills and expertise. Manufacturing wages also show a close correlation to water sector wage growth, and so should reflect similar cost pressure."¹

At the 2019 CMA appeals, Europe Economics said "manufacturing wages also showed a close correlation with water sector wage inflation and so should reflect similar cost pressure."² and the CMA's decision was "…that the ASHE manufacturing index is the most appropriate index to use in the true-up mechanism".³

Regional breakdown of manufacturing wages based on data from the ONS collected through the ASHE show that manufacturing wages in the South East from 2012 to 2022 were either the highest or the second highest across all regions (Chart 1).



Chart 1: Regional Labour Costs– Manufacturing hourly gross pay for full time workers (excluding overtime) by region and industry average, 2012 to 2022

Source: ONS (2022), Annual Survey of Hourly Earnings, link, last accessed: 16/05/2023.

Across the sample period Ofwat uses in the econometric models (2012-2022), wages in the South East were 11% above the industry average that the model implicitly funds (Table 1).

Table 1: Regional Labour Costs –	Manufacturing I	hourly gross pay	for full time	workers (excluding
overtime), average 2012-2022					

Description	Rank	Manufacturing hourly gross pay (2022-23 prices)	Deviation from industry average
London	1	£18.86	12%
South East	2	£18.68	11%
North West	3	£17.19	2%
East	4	£16.90	0%
North East	5	£16.71	-1%
Wales	6	£16.41	-3%
South West	7	£16.35	-3%
West Midlands	8	£16.31	-3%
East Midlands	9	£15.95	-5%
Yorkshire and the Humber	10	£15.40	-9%
National average		£16.88	

Source: ONS (2022), Annual Survey of Hourly Earnings, link, last accessed: 16/05/2023.

To ensure that the outcome was not skewed by the choice of sector, notwithstanding Ofwat's clear view that the manufacturing wage index is most representative of the water sector, we cross-checked against a further three representative industries from the ONS industry/sub-industry categories:

- Construction
- Civil Engineering (a sub-industry of the above)
- Water and Wastewater Services

Regardless of the industry we use, there is consistently a premium to employing staff in the South East, the region where Southern Water operates. These premiums range from 4-10% for Construction, Civil Engineering and Water and Wastewater Services, according to ONS data from ASHE. We measure the premium as the excess of the wage in the region above that for the national average for a given sector (see Appendix 1).

1.2 Why doesn't population density account for regional wage difference in Ofwat econometric models at PR24?

At PR19, Ofwat rejected Affinity Water's claim for an adjustment for higher regional labour costs. The claim was rejected on the grounds that:

- (i) population density off-sets higher wages;
- (ii) labour costs are under management control;
- (iii) other companies in the region did not apply for a similar claim; and
- (iv) the claim was likely to be immaterial.

Regional wages were also a company-suggested cost driver that was not included in Ofwat's proposed models for PR24 set out in its April 2023 base cost model consultation. Ofwat decided not to include a regional wage cost driver in the models as it considered that "(...) the inclusion of population density in our proposed models captures the effect of regional wage differentials on wholesale water base costs as the two are correlated (...)⁴"

At PR19, there was a high and significant correlation between the measure of population density used in Ofwat's models (*wedensity*) and the measure of wages (*rwasoc1* or *rwasoc2*), at 0.70 to 0.72 in water and 0.76 to 0.80 in wastewater.

At PR24, Ofwat is proposing three different measures of population density for water and wastewater – properties per length of mains/sewer, MSOA to LAD, and MSOA.

We developed a measure of company area labour costs based on regional manufacturing wages weighted by the geographical distribution of the population. Because the population distribution varies between water and wastewater, the labour cost variable for water differs from wastewater. Labour costs measured in this way are poorly correlated with all population density metrics Ofwat is considering for PR24. For water, the correlations range from 0.42 to 0.49. For wastewater, correlations range from 0.50 to 0.59. This is markedly different to the position at PR19.

Tables 2 and 3 show the results of this analysis using the following approach:

• Firstly, we constructed a company area labour cost variable for the period of 2011 to 2022 and for each company for both water and wastewater. We did so by adjusting the ASHE data on regional manufacturing hourly earnings by the proportion of population

that each company serves in each region. We also calculated a measure of regional wage differences as the percentage deviation between each company's labour cost and the industry mean in a given year.

 Secondly, we calculated the correlation between the company area labour cost variables and Ofwat's measures of population density.

Table 2: Correlation between measure of company area labour costs and Ofwat's metrics of
population density proposed for PR24 – Water (2011 – 2022; all companies)

Correlation coefficient	Properties per length of mains (logarithmic)	MSOA to LAD (logarithmic)	MSOA (logarithmic)
Hourly wage (level)	0.47	0.48	0.43
Hourly wage deviation to the industry mean	0.49	0.49	0.45
Hourly wage (logarithmic scale)	0.46	0.47	0.42

Table 3: Correlation between measure of company area labour costs and Ofwat's metrics of population density proposed for PR24 – Wastewater (2011 – 2022; all companies)

Correlation coefficient	Properties per length of sewer (logarithmic)	MSOA to LAD (logarithmic)	MSOA (logarithmic)
Hourly wage (level)	0.58	0.55	0.51
Hourly wage deviation to the industry mean	0.59	0.57	0.54
Hourly wage (logarithmic scale)	0.57	0.54	0.50

Given the poor correlation between company area labour costs and the metrics of population density, we do not consider that density captures regional wage costs differences in Ofwat's PR24 models.

1.3 Management Control

Regional wage levels are largely outside management control. Water companies compete against other businesses in the region for labour and, to a large degree, market forces dictate wages. This is particularly the case with roles that employ transferable skill sets and for labour that is required locally and competes with other industries locally. This includes skilled and semi-skilled labour required for the operation and maintenance of utilities, such as that required for our network infrastructure, which competes with higher wages in similar sectors in the South East and outer London.

By labour costs we mean both direct labour costs of Southern Water staff and indirect labour costs from third party service providers.

Whilst regional wage levels are not within management control, there is a range of strategies water companies can adopt to reduce the impact of regional labour costs. These include locating non-frontline staff away from the region served by the assets and outsourcing or offshoring to lower wage regions to mitigate the risk of exposure to higher wages.

We have employed these strategic mitigations. Our HR strategy has been to locate such roles outside our area to lower wage regions where this is beneficial to customers, in order to mitigate the exposure to higher wages in the South East. This has included relocating our retail customer service contact centre to Yorkshire and outsourcing and offshoring support services, such as IT and engineering roles where this is efficient, cost effective and in the best interests of customers.

However, the local nature of the service we provide, and the requirement to provide a 24/7 response capability, also means that the majority of the work we do needs to be physically undertaken where the assets are located and cannot be moved to lower wage locations. Similarly, given Southern's service area is largely located south of London, the daily travel time from lower wage area, such as the Midlands into our service area is in excess of 3 hours one-way, making daily commuting from a low wage area not a viable strategy either.

We do not make a claim in respect of Retail wages, because we have mitigated the impact of higher wages in our region by locating our customer service centre outside of our region where we benefit from lower wage costs for this service.

Since PR19, Ofwat no longer includes regional wage variables in its econometric modelling. It argued that *"companies can exercise control to mitigate this impact"*. We have demonstrated that this mitigation has been undertaken where this is feasible. However, the majority of our wages are related to operating and maintaining our network which require 24/7 availability and hence it is not possible to outsource these jobs to lower labour cost regions in the country. Neither would we outsource all operations out of the region. Customers value (and Ofwat expects) water companies to be part of the community with a clear understanding of their customers, communities and the environmental needs of the region.

1.4 Materiality of Claim

Ofwat sets a materiality threshold for Cost Adjustment Claims below which it considers claims to be immaterial. We have calculated materiality thresholds for each of the four wholesale price controls, based on an early view of our AMP8 efficient totex for each.

Table 4: Materiality Thresholds

Price control	Expected AMP8 totex	Materiality threshold (%)	Materiality amount (£m)
WN+	£1,998m	1%	£20m
WWN+	£2,804m	1%	£28m
Water resources	£884m	6%	£53m
Bioresources	£305m	6%	£18m

The table below summarises the materiality of the claim regarding each price control. We found that the water network plus part of the claim passed the threshold at 1.1% of the expected threshold and the wastewater network plus part of the claim also passed the materiality threshold at 2.4% of expected totex.

We calculated the materiality of similar claims for water resources and bioresources but these were found not to be material (see Appendix 4).

The derivation of the net value of the claim is set out in section 1.4 below.

Price control	Threshold (£m)	Net value of the claim (£m)	Claim as % of totex	Status
WN+	£20m	£22m	1.1%	Pass
WWN+	£28m	£66m	2.4%	Pass
Water resources	£53m	£2m	0.3%	Fail
Bioresources	£18m	£9m	2.9%	Fail

Table 5: Materiality test

1.5 What are the adjustments to the allowances?

Labour costs represent a large proportion of the overall cost base for water and sewerage companies. In the PR19 final determination Ofwat assumed that, on average, 38.6% of wholesale costs were for labour for the purposes of setting a real price effect for wage rates.⁵ This percentage includes both direct wages and indirect (i.e. outsourced) labour costs.

To calculate the required cost adjustment, we took the following steps:

- (i) Estimate the AMP8 efficient botex allowance for each price control, water network plus and wastewater network plus for Southern Water based on our current view of efficiency. Our business case submission will provide a more detailed view of efficiency.
- (ii) Calculate the labour proportion of wholesale costs using Ofwat's PR19 assumption of 38.6% of wholesale costs.⁶
- (iii) Calculate the local labour expenditure by multiplying the outcome of step (ii) by 80%, which is the proportion of labour sourced in the region. This results in the allowance for local labour costs implicit in Ofwat's econometric models.

 The 80% factor is within the range of the modelling work undertaken by CEPA for Ofwat at PR19 where CEPA assumed that between 70% and 100% of labour was sourced locally.⁷ This means assuming that 20% of our labour costs could be relocated to lower-wage regions through efficient management control.

- Our procurement strategy balances cost efficiency with the risk to customer performance. Assuming that 20% of all labour costs could be located outside of our area is a stretching target.
- (iv) Calculate the weighted average local wage for Southern Water. For water, 100% is within the South East region. For wastewater, this is calculated by multiplying the historical (i.e. 2011 to 2022) regional gross hourly manufacturing wages for South East and South West (sourced from ONS) by the proportion of population served in each region (98.2% in South East and 1.8% in South West.) The proportions are calculated based on Ofwat's distribution of population served by each company against Local Authority District (LAD).⁸

Weighted avg wage_i =
$$\sum_{j}$$
 Regional wage_j x Regional % population served_j

Where i = company and j = region.

- (v) Calculate the weighted average local wage across all companies based on the historical (2011 to 2022) ONS regional median manufacturing wage and the proportion of the population each company serves in each region.
- (vi)Calculate the percentage deviation of Southern Water's regional wage (step iv) from the average regional wage across all companies, including Southern (step v)
- (vii) Multiply the implicit allowance (from step iii) by the labour premium to derive the net value of the claim.

We adjusted the historical (2011 to 2022) ONS regional gross manufacturing hourly wage to 2022-23 prices using CPIH.

Step	Description	Water Network +	Wastewater Network+
(i)	AMP8 botex allowance estimate	£826m	£2,024m
(ii)	Labour costs within botex = (i) $\times 38.6\%$	£319m	£781m
(iii)	Implicit allowance for local labour cost outside management control = (ii) x 80%	£255m	£625m
(iv)	Southern Water company area hourly labour cost (based on ONS regional manufacturing wages)	£18.68 = 100.0% x £18.68	£18.64 = 98.2% x £18.68 + 1.8% x £16.35
(v)	Mean of company area hourly labour costs across the industry (based on ONS regional manufacturing wages)	£17.23	£16.85
(vi)	% regional wage premium = (iv) / (v) $- 1 \times 100$	8.4%	10.6%
(vii)	Net value of the claim = implicit allowance (step iii) x regional wage premium (step vi)	£22m	£66m

Table 6: Deriving the net value of the claim

The gross value of the claim, before deducting implicit allowance, results from summing the implicit allowance (step iii) and the net value of the claim (step vii). This results in a gross claim of £277m for water and £691m for wastewater.

We have also calculated a range of implicit allowances based on CEPA's assumption of labour sourced locally – between 70% and 100%. This provides a range of implicit allowance for Southern Water from £223m to £319m in water and £547m and £781m in wastewater (see Appendix 2 and 3).

1.6 Symmetrical Adjustment

We calculate a symmetrical adjustment across the whole industry by following the steps described in the previous session for each company. Tables 7 and 8 presents the proposed symmetrical adjustments for water and wastewater, respectively.

Company	Annual weighted average wage	Wage premium	PR24 botex £m (forecast)	Labour botex £m	Local labour (80%) £m	Symmetrical adjustment £m
ANH	16.61	-3.6%	1,744	673	539	-19
HDD						
NES	17.05	-1.0%	1,444	557	446	-5
UUW	17.19	-0.2%	2,334	901	721	-2
SRN	18.68	8.4%	826	319	255	22
SVE	16.17	-6.1%	2,640	1,019	815	-44
SWB	16.35	-5.1%	882	340	272	-14
TMS	18.68	8.4%	4,589	1,771	1,417	120
WSH	16.41	-4.8%	1,128	436	348	-17
WSX	16.35	-5.1%	548	212	169	-9
үкү	15.40	-10.6%	1.654	639	511	-54
AFW	17.87	3.7%	1,168	451	361	13
BRL	16.35	-5.1%	365	141	113	-6
PRT	18.68	8.4%	155	60	48	4
SES	18.76	8.9%	191	74	59	5
SEW	18.68	8.4%	791	305	244	21
SSC	16.42	-4.7%	509	197	157	-7
Industry	17.23	0%		8,142	6,514	2

Table 7: Symmetrical adjustment for water

Company	Annual weighted average wage	Wage premium	PR24 botex £m (forecast)	Labour botex £m	Local labour (80%) £m	Symmetrical adjustment £m
ANH	16.73	-0.7%	2,248	868	694	-5
HDD						
NES	16.70	-0.9%	985	380	304	-3
UUW	17.17	1.9%	2,405	928	743	14
SRN	18.64	10.6%	2,024	781	625	66
SVE	16.18	-4.0%	144	56	45	-2
SWB	16.35	-3.0%	794	307	245	-7
TMS	18.55	10.1%	4,545	1,755	1,404	141
WSH	16.43	-2.5%	1,310	506	405	-10
WSX	16.35	-3.0%	1,062	410	328	-10
үкү	15.42	-8.5%	1,814	700	560	-48
Industry	16.84	0.0%		6,690	5,352	137

Table 8: Symmetrical adjustment for wastewater

Our calculation of the symmetrical adjustment is based on ensuring a zero sum wage premium across the industry. We will continue to refine the calculation of the symmetrical adjustment for our business plan submission. As part of this we will consider an approach that ensures zero sum of the value of the symmetrical adjustment across the industry, as opposed to a zero sum of the wage premium.

1. Cost Efficient

Ofwat and other economic regulators have recognised that there are labour cost differentials between the South East and elsewhere in England and Wales. In previous price reviews Ofwat included a specific regional wages variable in the econometric models, most recently at PR14. The Competition and Markets Authority accepted the case for a regional labour special cost factor, most notably in PR14 re-determination for Bristol Water.

Other economic regulators in similar regulated sectors have also recognised regional variance in wages. For RIIO-ED1, Ofgem accepted that there were regional labour costs and used data provided by the Office of National Statistics (ONS) Annual Survey of Hourly Earnings (ASHE) to calculate labour indices for the three regions and determined a reasonable adjustment for each Distribution Network Operator (DNO). Similarly, at RIIO-ED2, UK Power Networks (UKPN) were provided a cost allowance for operating in London and the South East as Ofgem's methodology used a three-region approach (London, the South East and elsewhere) to recognise regional wage differences. Their explanation was that "*that there is sufficient mobility of labour to mitigate wage differentials throughout GB,*

however productivity and cost of living factors in London, and to a lesser extent in the South-East, lead to persistent wage inequality across these three regions".⁹

As described above, we have taken steps to mitigate the impact of high wages in the South East, in particular by locating a significant number of roles that do not need to be done locally outside of our region. This includes:

- (i) Locating our customer contact centre in Yorkshire
- (ii) Business Process Outsourcing (BPO) of back office for Support Services including:
 - a. HR/Payroll
 - b. Finance
 - c. Procurement
 - d. IT Reporting
- (iii) Offshoring some IT contracts, where efficient and effective
- (iv) Business Process Outsourcing (BPO) of back office engineering processes for Developer Services

Our HR strategy has been to maximise cost efficient and cost effective solutions, but not at the expense of customer service. Therefore, only services which provide both value for money and ensure expected levels of customer service are outsourced and located outside of our region. Despite these mitigations, it is clear that the majority of roles need to be done in-region and for these we must compete in the local labour market.

We have made an adjustment of 20% to our claim to reflect management control over the location of some functions whilst maintaining customer performance.

While acknowledging the role of management control, ONS ASHE data generally represents a cost efficient level for wages since Southern Water will have difficulty attracting and maintaining staff if the wages it offers are below that offered by a typical competitor employer.

2. Need for Investment (where appropriate)

Not Applicable

3. Best Option for Customers (where appropriate)

Not Applicable

4. Customer Protection (where appropriate)

Not Applicable

References

- 1 Ofwat, PR19 FD, Securing cost efficiency technical appendix, December 2019, p. 196-197
- 2 CMA, Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations, final report, March 2021, para 4.683

- 3 CMA, Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services limited price determinations, final report, March 2021, final report para 4.704
- 4 Ofwat, Econometric base cost models for PR24, April 2023, p.30.
- 5 Ofwat, Securing cost efficiency technical appendix, December 2019, p.211
- 6 Ofwat, Securing cost efficiency technical appendix, December 2019, p. 211
- 7 CEPA, Cost Assessment PR19 Benchmarking Models, March 2018, p.121
- 8 Ofwat, Final determination Household-forecast_FD.xlsx (live.com)
- 9 Ofgem, RIIO-ED2 Final Determination Core Methodology, para 7.24 7.26

Appendix

- A 1 Wage premium for alternative sectors
- A.2 Range of estimates for implicit allowances Water network +
- A 3 Range of estimates for implicit allowances Wastewater network +

A 4 Net value of the claim – Water resources and Bioresources

Appendix 1. Wage premium for alternative sectors

 Table A1.1: Regional Labour Costs – Construction hourly gross pay for full time workers (excluding overtime), average 2012-2022

Description	Rank	Construction hourly gross pay (2022-23 prices)	Deviation from industry average
London	1	£18.46	26.94%
South East	2	£15.74	8.27%
East	3	£14.96	2.89%
East Midlands	4	£14.35	-1.34%
West Midlands	5	£14.20	-2.31%
Yorkshire and the Humber	6	£13.95	-4.05%
North West	7	£13.92	-4.26%
South West	8	£13.63	-6.28%
North East	9	£13.33	-8.29%
Wales	10	£12.86	-11.57%
National average		£14.54	

Source: ONS (2022), Annual Survey of Hourly Earnings, link, last accessed: 16/05/2023.

Table A1.2: Regional Labour Costs – Civil Engineering hourly gross pay for full time workers (excluding overtime), average 2012-2022

Description	Rank	Civil engineering hourly gross pay (2022-23 prices)	Deviation from industry average
London	1	£19.43	27.10%
South East	2	£15.92	4.09%
West Midlands	3	£15.87	3.82%
North West	4	£15.38	0.55%
East Midlands	5	£15.36	0.48%
East	6	£15.19	-0.69%
Yorkshire and the Humber	7	£14.78	-3.32%
South West	8	£13.96	-8.67%
North East	9	£13.51	-11.68%
Wales	10	£13.51	-11.68%
National average		£15.29	

Source: ONS (2022), Annual Survey of Hourly Earnings, link, last accessed: 16/05/2023.

Table A1.3: Regional Labour Costs - Water and Wastewater Services hourly gross pay for full time
workers (excluding overtime), average 2012-2022

Description	Rank	Water and wastewater services hourly gross pay (2022-23 prices)	Deviation from industry average
South East	1	£15.04	10.26%
South West	2	£14.37	5.31%
East	3	£14.29	4.76%
Yorkshire and the Humber	4	£13.91	1.94%
London	5	£13.62	-0.17%
North East	6	£13.56	-0.60%
Wales	7	£13.39	-1.86%
North West	8	£12.91	-5.38%
West Midlands	9	£12.87	-5.63%
East Midlands	10	£12.46	-8.63%
National average		£13.64	

Source: ONS (2022), Annual Survey of Hourly Earnings, link, last accessed: 16/05/2023.

Appendix 2. Range of estimates for implicit allowances – Water network+

Company	Annual weighted average wage	Wage premium	PR24 botex £m (forecast)	Labour botex £m	Implicit allowance based upon 100% local labour £m	Symmetrical adjustment £m
ANH	16.61	-3.6%	1,744	673	673	-24
HDD						
NES	17.05	-1.0%	1,444	557	557	-6
UUW	17.19	-0.2%	2,334	901	901	-2
SRN	18.68	8.4%	826	319	319	27
SVE	16.17	-6.1%	2,640	1,019	1,019	-62
SWB	16.35	-5.1%	882	340	340	-17
TMS	18.68	8.4%	4,589	1,771	1,771	149
WSH	16.41	-4.8%	1,128	436	436	-21
WSX	16.35	-5.1%	548	212	212	-11
үкү	15.40	-10.6%	1,654	639	639	-68
AFW	17.87	3.7%	1,168	451	451	17
BRL	16.35	-5.1%	365	141	141	-7
PRT	18.68	8.4%	155	60	60	5
SES	18.76	8.9%	191	74	74	7
SEW	18.68	8.4%	791	305	305	26
SSC	16.42	-4.7%	509	197	197	-9
Industry	17.23	0%		8,142	8,142	71

Table A2.1: Implicit allowance for water network + - local labour at 100%

Company	Annual weighted average wage	Wage premium	PR24 botex £m (forecast)	Labour botex £m	Implicit allowance based upon 70% local labour £m	Symmetrical adjustment £m
ANH	16.61	-3.6%	1,744	673	471	-17
HDD						
NES	17.05	-1.0%	1,444	557	390	-4
UUW	17.19	-0.2%	2,334	901	631	-2
SRN	18.68	8.4%	826	319	223	19
SVE	16.17	-6.1%	2,640	1,019	713	-44
SWB	16.35	-5.1%	882	340	238	-12
TMS	18.68	8.4%	4,589	1,771	1,240	105
WSH	16.41	-4.8%	1,128	436	305	-15
WSX	16.35	-5.1%	548	212	148	-8
үкү	15.40	-10.6%	1,654	639	447	-47
AFW	17.87	3.7%	1,168	451	316	12
BRL	16.35	-5.1%	365	141	99	-5
PRT	18.68	8.4%	155	60	42	4
SES	18.76	8.9%	191	74	52	5
SEW	18.68	8.4%	791	305	214	18
SSC	16.42	-4.7%	509	197	138	-6
Industry	17.23	0%		8,142	4,807	49

Table A2.2: Implicit allowance for water network + – local labour at 70%

Appendix 3. Range of estimates for implicit allowances – Wastewater network+

Company	Annual weighted average wage	Wage premium	PR24 botex £m (forecast)	Labour botex £m	Implicit allowance based upon 100% local labour £m	Symmetrical adjustment £m
ANH	16.73	-0.7%	2,248	868	868	-6
HDD						
NES	16.70	-0.9%	985	380	380	-3
UUW	17.17	1.9%	2,405	928	928	17
SRN	18.64	10.6%	2,024	781	781	83
SVE	16.18	-4.0%	144	56	56	-2
SWB	16.35	-3.0%	794	307	307	-9
TMS	18.55	10.1%	4,545	1,755	1,755	177
WSH	16.43	-2.5%	1,310	506	506	-13
WSX	16.35	-3.0%	1,062	410	410	-12
үкү	15.42	-8.5%	1,814	700	700	-60
Industry	16.85	0.0%		6,690	6,690	172

Table A3.1: Implicit allowance for wastewater network + labour costs – local labour at 100%

Company	Annual weighted average wage	Wage premium	PR24 botex £m (forecast)	Labour botex £m	Implicit allowance based upon 70% local labour £m	Symmetrical adjustment £m
ANH	16.73	-0.7%	2,248	868	607	-4
HDD						
NES	16.70	-0.9%	985	380	266	-2
UUW	17.17	1.9%	2,405	928	650	12
SRN	18.64	10.6%	2,024	781	547	58
SVE	16.18	-4.0%	144	56	39	-2
SWB	16.35	-3.0%	794	307	215	-6
TMS	18.55	10.1%	4,545	1,755	1,228	124
WSH	16.43	-2.5%	1,310	506	354	-9
WSX	16.35	-3.0%	1,062	410	287	-9
үкү	15.42	-8.5%	1,814	700	490	-42
Industry	16.85	0.0%		6,690	4,683	120

Appendix 4. Net value of the claim – Water resources and Bioresources

Table A4.1: Net value of the claim, water resources

Company	Annual weighted average wage	Wage premium	PR24 botex £m (forecast)	Labour botex £m	Local labour (80%) £m	Symmetrical adjustment £m
ANH	16.61	-3.6%	247	95	76	-3
HDD						
NES	17.05	-1.0%	309	119	95	-1
UUW	17.19	-0.2%	464	179	143	0
SRN	18.68	8.4%	91	35	28	2
SVE	16.17	-6.1%	352	136	109	-7
SWB	16.35	-5.1%	83	32	26	-1
TMS	18.68	8.4%	479	185	148	12
WSH	16.41	-4.8%	195	75	60	-3
WSX	16.35	-5.1%	71	28	22	-1
үкү	15.40	-10.6%	227	88	70	-7
AFW	17.87	3.7%	109	42	34	1
BRL	16.35	-5.1%	79	30	24	-1
PRT	18.68	8.4%	31	12	9	1
SES	18.76	8.9%	25	10	8	1
SEW	18.68	8.4%	98	38	30	3
SSC	16.42	-4.7%	54	21	17	-1
Industry	17.23	0%		1,131	904	-5

Company	Annual weighted average wage	Wage premium	PR24 botex £m (forecast)	Labour botex £m	Implicit allowance based upon 80% local labour £m	Net value of the claim (Symmetrical adjustment) £m
ANH	16.73	-0.7%	483	186	149	-1
HDD						
NES	16.70	-0.9%	89	34	28	0
UUW	17.17	1.9%	466	180	144	3
SRN	18.64	10.6%	272	105	84	9
SVE	16.18	-4.0%	27	11	8	0
SWB	16.35	-3.0%	107	41	33	-1
TMS	18.55	10.1%	781	301	241	24
WSH	16.43	-2.5%	148	57	46	-1
WSX	16.35	-3.0%	139	54	43	-1
үкү	15.42	-8.5%	352	136	109	-9
Industry	16.85	0.0%		1,106	885	22

Table A4.2: Net value of the claim, bioresources