Tideway

Tideway updated revised Revenue Statement 2019

Allowed Revenue for Charging Year 2020/21

2340-TDWAY-TTTUN-990-ZZ-ED-700062

Updated revised Revenue Statement - 2020/21 Allowed Revenue

Submitted to Ofwat on 19 December 2019

£, nominal	Year preceding Prior Charging Year 2017/18	Prior Charging Year 2018/19	Current Charging Year 2019/20	Forthcoming Charging Year 2020/21
Allowed Revenue	28,559,132	49,235,940	63,431,062	76,465,429
Amounts received from TWUL	26,791,391	38,387,688		

Tideway 2019 updated revised Revenue Statement submission 18 12 2019 FINAL - WEB

RPI Updated IP Charge Notification - 2020/21

Submitted to Thames Water on 19 December 2019

IP Charge for 2020/21 (£) | 76,465,429 |

November 2019 RPI

291.0

Source: RPI (All Items) index, Consumer Price Inflation Reference Tables, Table 36, 18 December 2019, Office for National Statistics

Tideway 2019 updated revised Revenue Statement submission 18 12 2019 FINAL - WEB

Statement of calculation

Introduction

The following section sets out how Tideway's Allowed Revenue calculation has been made for the charging year 2020/21 (Sixth Charging Year).
The Licence has been written to provide the basis of a revenue submission in a typical year. A number of detailed modelling assumptions have been made in interpreting Appendix 1 of the Project Licence to ensure the mechanics of the calculation are in line with the spirit of the licence. These modelling assumptions are set out in the table below.
This model, including these assumptions, as set out in the table below, has been sent to Ofwat. In an email dated 30/10/19, Ofwat noted it is content with the resolutions described.

Sheet	Issue	Resolution
BBRA Inputs 2016, BBRA Inputs 2017, BBRA Inputs 2018, Inputs 2019	The 2014/15 RPI Adjustment Factor refers to "the percentage movement in the RPI (All Items) index as published by ONS for the period April to September in the calendar year..." However, if the index values for April and September are taken, this only picks up 5 months of inflation. Together with the other elements of the formula, this results in an underestimate of inflation for the Charging Year.	Interpret the movement for the period April to September as the movement between the March and September index values, which ensures April inflation is also picked up.
BBRA Calculation 2016, BBRA Calculation 2017, BBRA Calculation 2018, Calculation 2019	Annual Actual Project Spend for the current Charging Year (Yt-1) feeds into the calculation of RCV, which is required for the calculation of the Return on Capital and Liquidity building blocks. The licence specifies that Annual Actual Project Spend should be deflated by the Applicable Change in Cost RPI for a Charging Year, rather than the 2014/15 RPI Adjustment Factor. However, the Applicable Change in Cost RPI can only be calculated following the publication of RPI for each month of the relevant Charging Year. This information is not available for the current Charging Year at the time the Revenue Statement is prepared.	Use the 2014/15 RPI Adjustment Factor to deflate the Annual Actual Project Spend in the current Charging Year. This will be trued up in next year's Revenue Statement as part of the building block reconciliation adjustment.
BBRA Calculation 2016, BBRA Calculation 2017, BBRA Calculation 2018	In order to reconcile Allowed Revenue calculated in prior years for updated inflation, it is not appropriate to use the 2014/15 RPI Adjustment Factor defined in Tideway's licence as more up to date information is available (i.e. a further year of actual inflation data which can be used to replace the forecast).	Use approach consistent with definition of 2014/15 RPI Adjustment Factor but with actual inflation used up to September of Yt. This is equivalent to applying the 2014/15 RPI Adjustment Factor values as calculated for the Sixth Charging Year Allowed Revenue calculation, and ensures the latest actual RPI data is taken into account.
Calculation 2019	One of the terms in the formula for the under/over recovered revenue adjustment (as set out in Appendix 1, Part A 7 of Tideway's licence) is "the amount in respect of the IP Charge recovered by the Infrastructure Provider in respect of Charging Year t-2". However, the licence does not specify the time period to which this element of the calculation should relate.	Interpret "the amount in respect of the IP Charge recovered by the Infrastructure Provider in respect of Charging Year t-2" as the amount that has been paid by Thames Water to Tideway and receipted in Tideway's bank account prior to the end of September of Charging Year t-1. Note: For the 2018 Revenue Statement, the under/over recovered revenue adjustment was calculated with reference to amounts recovered by Tideway prior to the end of October 2018 (as noted on Inputs 2019).
Calculation 2019	Appendix 1, Part A 7 of Tideway's licence requires that the under/over recovered revenue adjustment is calculated on a net present value neutral basis using the BWACC, but it does not specify the adjustment formulaically or specify the means of adjusting for inflation.	Apply a net present value adjustment in nominal terms by using (1+BWACC) as the real discount factor and adjusting for inflation using RPI. To reconcile amounts not yet received in respect of Charging Year t-2, this involves multiplying the unadjusted reconciliation amount by (1+BWACC)^2 and the ratio between the Applicable Change in Revenue RPI of the two charging years (to account for the two year delay in revenue receipts). A separate one-year NPV adjustment is applied to the further amounts received in respect of any Charging Year falling prior to Charging Year t-2 that have not been included in a previous revenue adjustment calculation. This is to account for the one-year delay between the collection of the original amounts and their incorporation into this revenue adjustment calculation for the forthcoming Charging Year. The adjustment involves multiplying the unadjusted reconciliation amount by (1+BWACC) and the ratio between the Applicable Change in Revenue RPI in the current and forthcoming Charging Years.
Calculation 2019	Appendix 1, Part A 8 of Tideway's licence requires a reconciliation adjustment of a number of building blocks for updated values. The licence requires that the adjustment is calculated on a net present value neutral basis using the BWACC, but it does not specify the adjustment formulaically or specify the means of adjusting for inflation.	Apply a net present value adjustment in nominal terms by using (1+BWACC) as the real discount factor and adjusting for inflation using RPI, taking into account the number of years since the Allowed Revenue for a given year was first calculated. This involves multiplying the reconciliation amount by (1+BWACC) raised to the power of the number of years since the Allowed Revenue for the relevant year was first calculated, and the ratio between the Applicable Change in Revenue RPI of the two Charging Years. The reconciliation amount is calculated relative to the value calculated in the prior year. The formulae used to perform this reconciliation are as set out in this statement of calculation.
BBRA Calculation 2016, BBRA Calculation 2017, BBRA Calculation 2018	Reconciliation Adjustment (A 8) states that the Financing Cost Adjustment should be subject to reconciliation, but none of the elements of this calculation are forecast.	Leave a placeholder for reconciliation of the Financing Cost Adjustment should this, for any reason, become relevant in future, but exclude from calculation at present.
BBRA Calculation 2016, BBRA Calculation 2017, BBRA Calculation 2018, Calculation 2019	Additional Return on Capital and Additional Liquidity Building Blocks may never become relevant (i.e. these building blocks may only become relevant if Tideway applies for an Increase in Allowed Revenue (IAR).)	Exclude calculations for Additional Return on Capital and Additional Liquidity until there is a non-negligible probability that these will be required.

Key to Charging Years

Year	Charging Year	Full description
2015/16	Y1	First Charging Year
2016/17	Y2	Second Charging Year
2017/18	Y3	Third Charging Year
2018/19	Y4	Fourth Charging Year
2019/20	Y5	Fifth Charging Year
2020/21	Y6	Sixth Charging Year
2021/22	Y7	Seventh Charging Year

Summary

Below is a high-level breakdown of the Allowed Revenue for the Sixth Charging Year, with respect to each of the building blocks involved in the calculation.

'Tideway Allowed Revenue (t) =		Return on capital	+ Liquidity	+ Operating expenditure	- Financing cost adjustment	+ Tax	+ Revenue adjustment	+ Building block for reconciliation adjustment	+ Additional return on capital	+ Additional liquidity
Tideway Allowed Revenue (Sixth Charging Year)	=	65.0	+ 12.9	+ 0	-3.2	+ 0	+ 2.7	-0.9	+ 0	+ 0
	=	76.5	(£m)							

The calculation of each of these elements is described below.

Inputs

The inputs to this calculation, and the sources of these inputs, are set out on the "Inputs 2019" "BBRA Inputs 2018", "BBRA Inputs 2017" and "BBRA Inputs 2016" sheets of this workbook. The "BBRA Inputs 2016" sheet isolates the inputs required to reconcile the Allowed Revenue first calculated in 2016 (for the Third Charging year), the "BBRA Inputs 2017" sheet isolates the inputs required to reconcile Allowed Revenue first calculated in 2017 (for the fourth charging year) and the "BBRA Inputs 2018" sheet isolates the inputs required to reconcile Allowed Revenue first calculated in 2018.
All the reconciliations are for updated cost and inflation data and the inputs are consistent with those set out on "Inputs 2019".
In line with Appendix 1 A8 of Tideway's licence, the Expenditure Forecast is that most recently verified by the Independent Technical Assessor (verified 23/10/2019).
It represents the company's latest verified forecast of cash expenditure over 2019/20, 2020/21 and 2021/22.

Return on Capital

The Return on Capital building block allows Tideway to earn a return on capital in relation to the forecast average RCV in the Charging Year in question.
Average RCV is calculated using annual actual, estimated and forecast allowable project spend, as shown in the table below.

£m, 2014/15 prices	Y1	Y2	Y3	Y4	Y5	Y6	Y7
Opening RCV	0.0	148.7	478.5	962.3	1,490.3	2,034.1	2,558.1
Allowable Project Spend	148.7	329.8	483.8	528.0	543.7	524.0	385.7
Closing RCV	148.7	478.5	962.3	1,490.3	2,034.1	2,558.1	2,943.8
Average RCV	74.4	313.6	720.4	1,226.3	1,762.2	2,296.1	2,750.9

For the Sixth Charging Year, this building block is calculated as follows:

Return on Capital =	Average RCV in Y6	*	Bid WACC	*	Applicable Change in Revenue RPI for the Sixth Charging Year
=	2,296.1	*	2.497%	*	$\frac{291.0}{256.7}$
=	65.0	(£m)			

Liquidity

The Liquidity building block allows Tideway a liquidity allowance (return on capital) in relation to the incremental average RCV in the year following the Charging Year in question.

For the Sixth Charging Year, this building block is calculated as follows:

Liquidity =	(Forecast average RCV in year 7 - Average RCV in year 6) * Bid WACC * Applicable Change in Revenue RPI for the the Sixth Charging Year
=	454.8 * 2.497% * $\frac{291.0}{256.7}$
=	12.9 (£m)

Operating Expenditure (opex)

In line with Tideway's licence, the Opex building block is currently zero as all costs are accounted for as capital expenditure.

Financing Cost Adjustment

The Financing Cost Adjustment building block is intended to protect against movements in the market cost of debt, recognising that Tideway's Bid WACC will apply for a much longer period than the standard five year control period for a WaSC or WoC.

The Financing Cost Adjustment for a given year is calculated as follows:

Financing Cost Adjustment (t) =

(Net Debt (t-2) - Net Debt (t-3)) * Market Cost of Debt Adjustment Factor (t) * (1 + BWACC)^2 * $\frac{\text{Applicable Change in Revenue RPI (t)}}{\text{Applicable Change in Revenue RPI (t-2)}}$

where Market Cost of Debt Adjustment Factor (t) =

i) if the difference between the BRP and the ARP on any ARP Calculation Date is +/- 50 bps, the market cost of debt adjustment will be 0
ii) if the difference between the BRP and the ARP is between (+/-) 51 bps and 100 bps, the market cost of debt adjustment factor will be equal to 50% of the amount by which such difference exceeds 50bps
iii) if the difference between the BRP and the ARP is greater than +/- 100 bps, the market cost of debt adjustment factor will be equal to the amount by which such difference exceeds 75 bps
The Market Cost of Debt Adjustment Factor shall be expressed as a positive figure where the ARP exceeds the BRP, and a negative figure where the BRP exceeds the ARP.

BRP = the 12 months' trailing average of the Financing Cost Adjustment Index Yield as at 31 March 2015
ARP = the 12 months' trailing average of the Financing Cost Adjustment Index Yield as at 31 March of Charging Year t-2

where the Financing Cost Adjustment Index Yield = $\frac{(1+ iBoxx \text{ BBB UK non-financials with 10+ year maturity)}}{(1 + \text{spot implied inflation rates for 10 year maturity published by the Bank of England)}}$ - 1

Note that where the ratio between Net Debt and Ofwat-stated RCV (current prices) is higher than the notional debt to RCV ratio, Net Debt will be deemed to equal the notional debt to RCV ratio multiplied by the Ofwat-stated RCV in current prices.

The Financing Cost Adjustment Building Block for each Charging Year is the sum of the Financing Cost Adjustment for that Charging Year and all previous Charging Years, to reflect the build-up of the market cost of debt protection over time.
The table below summarises the build-up of the Financing Cost Adjustment in previous years, and details of prior years calculations are available in previous Revenue Statements (with the relevant Revenue Statement identified in the table).
There was no Financing Cost Adjustment in respect of the Allowed Revenue for the First or Second Charging Years, as in both cases, Tideway did not exist in Charging Year t-2 and t-3, and so did not hold any Net Debt at this time.
The Financing Cost Adjustment building block was zero in the Third Charging Year as the difference between the BRP and ARP was less than 50 bps, and therefore the Market Cost of Debt Adjustment Factor was zero.

	Charging Year					
	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Revenue Statement	2015	2016	2017	2018	2019
Base Reference Point	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%
Annual Reference Point	1.30%	1.30%	1.43%	0.35%	0.01%	0.23%
Market Cost of Debt Adjustment Factor	0.00%	0.00%	0.00%	-0.22%	-0.54%	-0.32%
Financing Cost Adjustment	0.00	0.00	0.00	0.5	-1.5	-2.2
Financing Cost Adjustment building block (cumulative)	0.00	0.00	0.00	0.5	-1.0	-3.2

For the Sixth Charging Year, this building block is calculated as follows:

Financing Cost Adjustment (year 6) =

(Net Debt (year 4) - Net Debt (year 3)) * Market Cost of Debt Adjustment Factor (year 6) * (1 + BWACC)^2 * $\frac{\text{Applicable Change in Revenue RPI (year 6)}}{\text{Applicable Change in Revenue RPI (year 4)}}$

= (543.2 - -72.1) * -0.32% * (1+ 0.02497) ^2 * $\frac{1.13}{1.07}$

= -2.2 (£m)

Where the Market Cost of Debt Adjustment Factor (year 6) results from the difference between the BRP and the ARP:

BRP - ARP= 1.30% - 0.23%

= 1.07%, a difference of 107 basis points, which falls in the greater than 100 bps band.

This leads to a Market Cost of Debt Adjustment Factor (year 5) of the amount by which this difference exceeds 75bps, or (1.07% - 0.75%)) = -0.32%
(The Market Cost of Debt Adjustment Factor shall be expressed as a positive figure where the ARP exceeds the BRP, and as a negative figure where the BRP exceeds the ARP)

Financing Cost Adjustment building block =

Financing Cost Adjustment(year 1) + Financing Cost Adjustment(year 2) + Financing Cost Adjustment(year 3) + Financing Cost Adjustment(year 4) + Financing Cost Adjustment(year 5) + Financing Cost Adjustment(year 6)

= 0 + 0 + 0 + 0.5 -1.5 -2.2

= -3.2 (£m)

Tax
In line with Tideway's licence, the tax building block is zero as Tideway is not currently required to pay corporation tax or any other income-based tax.

Revenue Adjustment
The revenue adjustment building block is to reconcile for under/over recovered Allowed Revenue in previous Charging Years. Appendix 1 A7 of the licence defines it as:

RA Yt = Allowed Revenue for Charging Year t-2 – (the amount in respect of the IP Charge recovered by the Infrastructure Provider in respect of Charging Year t-2 + the amount in respect of the IP Charge recovered by the Infrastructure Provider in respect of any Charging Year falling prior to Charging Year t-2 that has not been included in any previous RA calculation)

This building block applied for the first time in the Fourth Charging Year (2018/19). There was no revenue adjustment for the Allowed Revenue in the Third Charging Year, as Thames Water only started billing Tideway's revenue in the Second Charging Year (2016/17).

The Revenue Adjustment for the Sixth Charging Year is based on recovery of revenue for the Second, Third and Fourth Charging Years. The Fourth Charging Year is being reconciled for the first time and the Second and Third Charging Years are being reconciled to remove amounts that have been reconciled previously but have subsequently been recovered from Thames Water.
The table below sets out the amount in respect of the IP Charge recovered by Tideway in respect of the Fourth Charging Year at the time this Revenue Statement is being prepared. This is split between 2018/19 (as reported in our 2018/19 Annual Report) and the period April to September 2019 (consistent with the assumptions set out in the table at the beginning of this statement).

£m		Payment received from Thames Water in period							
		2016/17		2017/18		2018/19		2019/20	Total
Charging Year	Allowed revenue	Apr-Sep	Oct-Mar	Apr-Sep	Oct-Mar	Apr-Sep	Oct-Mar	Apr-Sep	
2015/16	11.2	12.1	14.6	4.3	0.8	0.3	0.2	0.4	32.8
2016/17	22.4			9.3	12.4	2.4	0.4	0.2	24.8
2017/18	28.6	n/a	n/a	9.3	12.4	2.4	0.4	0.2	24.8
2018/19	49.2	n/a	n/a	n/a	n/a	16.3	18.7	10.7	45.7

Note: The table data is extracted from Tideway's 2018/19 Annual Report. The calculations below reflect amounts recovered until October 2018 instead of September 2018, as agreed with Ofwat.

Reconciliation amounts in respect of Fourth Charging Year (before NPV adjustment)
= Allowed Revenue for Fourth Charging Year - Amount in respect of the IP Charge recovered by the Infrastructure Provider in respect of Fourth Charging Year (to end of September 2019)

= 49.2 - 45.7

= 3.5 (£m)

Reconciliation amounts in respect of Third Charging Year not previously included (before NPV adjustment)
= Amount in respect of the IP Charge recovered by the Infrastructure Provider in respect of the Third Charging Year (to end of September 2019) - Amount in respect of the IP Charge recovered by the Infrastructure Provider in respect of Third Charging Year (to end of September 2018)

= 24.8 - 24.2

= 0.6 (£m)

Reconciliation amounts in respect of Second Charging Year not previously included (before NPV adjustment)
= Amount in respect of the IP Charge recovered by the Infrastructure Provider in respect of the Second Charging Year (to end of September 2019) - Amount in respect of the IP Charge recovered by the Infrastructure Provider in respect of Second Charging Year (to end of September 2018)

= 32.8 - 32.2

= 0.5 (£m)

As required by Appendix 1 A7 of the licence, the reconciliation amounts are subject to a net present value (NPV) adjustment, which is set out below. The NPV adjustments are made consistent with the assumptions set out in the table at the beginning of this statement.

Reconciliation amounts in respect of Fourth Charging Year (after NPV adjustment)
= Reconciliation amounts in respect of Fourth Charging Year (before NPV adjustment) * ((1+BWACC)^2)) * $\frac{\text{Applicable Change in Revenue RPI (year 6)}}{\text{Applicable Change in Revenue RPI (year 4)}}$

= 3.5 * ((1 + 0.02497)^2) * $\frac{1.13}{1.07}$

= 3.9 (£m)

Reconciliation amounts in respect of Third Charging Year not previously included (after NPV adjustment)
= Reconciliation amounts in respect of Third Charging Year not previously included (before NPV adjustment) * (1+BWACC) * $\frac{\text{Applicable Change in Revenue RPI (year 6)}}{\text{Applicable Change in Revenue RPI (year 5)}}$

= -0.6 * (1 + 0.02497) * $\frac{1.13}{1.11}$

= -0.6 (£m)

Reconciliation amounts in respect of Second Charging Year not previously included (after NPV adjustment)
= Reconciliation amounts in respect of Second Charging Year not previously included (before NPV adjustment) * (1+BWACC) * $\frac{\text{Applicable Change in Revenue RPI (year 6)}}{\text{Applicable Change in Revenue RPI (year 5)}}$

= -0.5 * (1 + 0.02497) * $\frac{1.13}{1.11}$

= -0.6 (£m)

Revenue Adjustment (Sixth Charging Year) (after NPV adjustment)
= Reconciliation amounts in respect of Fourth Charging Year (after NPV adjustment) + Reconciliation amounts in respect of Second Charging Year not previously included (after NPV adjustment) + Reconciliation amounts in respect of Third Charging Year not previously included (after NPV adjustment)

= 3.9 -0.6 -0.6

= 2.7 (£m)

Building Block Reconciliation Adjustment (BBRA)
A reconciliation adjustment applies for the Return on Capital, Liquidity, Opex, Financing Cost Adjustment, Tax, Additional Return on Capital and Additional Liquidity building blocks.
The reconciliation is calculated on a net present value neutral basis, using the Bid WACC as the discount factor. It reconciles for actual values realised since the previous calculation of the Allowed Revenue for a particular year, and updated forecasts. In practice, this means reconciling for updated expenditure and inflation.
In the 2019 Revenue Statement, the building block reconciles 2019/20 Allowed Revenue for the first time and includes a further reconciliation of 2017/18 and 2018/19 Allowed Revenue. The 2017/18 Allowed Revenue is being reconciled for the final time in this 2019 Revenue Statement. This is because actual values have now been realised for all inputs to this calculation, with no forecasts that would require further reconciliation. The 2015/16 and 2016/17 Allowed Revenues have been fully reconciled in previous years.

	Allowed Revenue				
	2015/16	2016/17	2017/18	2018/19	2019/20
Allowed Revenue - as calculated for 2015 Revenue Statement	11.2	22.4			
Allowed Revenue - as calculated for 2016 Revenue Statement	8.7	19.8	34.0		
Allowed Revenue - as calculated for 2017 Revenue Statement	8.1	18.6	32.9	49.5	
Allowed Revenue - as calculated for 2018 Revenue Statement		18.2	31.9	48.4	62.5
Allowed Revenue - as calculated for 2019 Revenue Statement			31.7	47.7	62.6

The table above shows the Allowed Revenue for each year as calculated/recalculated in each Revenue Statement
The Allowed Revenue figures set out above exclude the building block reconciliation adjustment (BBRA) and revenue adjustment (RA) building blocks, which are not subject to reconciliation (and which were zero for 2015/16 and 2016/17 Allowed Revenue).
The building block reconciliation is made on a net present value neutral basis using the Bid WACC as a discount factor and adjusting for inflation using RPI, which takes into account the number of years since the Allowed Revenue for a given year was first calculated. This gives the following calculation:

Building block reconciliation adjustment = (Sixth Charging Year)
(2017/18 Allowed Revenue [2019 calculation] - 2017/18 Allowed Revenue [2018 calculation]) * (1 + Bid WACC)^3 * $\frac{\text{Applicable Change in Revenue RPI (year 6)}}{\text{Applicable Change in Revenue RPI (year 3)}}$ + (2018/19 Allowed Revenue [2019 calculation] - 2018/19 Allowed Revenue [2018 calculation]) * (1 + Bid WACC)^2 * $\frac{\text{Applicable Change in Revenue RPI (year 6)}}{\text{Applicable Change in Revenue RPI (year 4)}}$ + (2019/20 Allowed Revenue [2019 calculation] - 2019/20 Allowed Revenue [2018 calculation]) * (1 + Bid WACC)^1 * $\frac{\text{Applicable Change in Revenue RPI (year 6)}}{\text{Applicable Change in Revenue RPI (year 5)}}$

= (31.7 - 31.9) * ((1 + 0.02497)^3) * $\frac{1.13}{1.03}$ + (47.7 - 48.4) * ((1 + 0.02497)^2) * $\frac{1.13}{1.07}$ + (62.6 - 62.5) * ((1 + 0.02497)^1) * $\frac{1.13}{1.11}$

	=	-0.3		-0.8	+	0.1
	=	-0.9	(£m)			

The sections below set out the recalculation of the 2017/18, 2018/19 and 2019/20 Allowed Revenue.

Return on Capital

Third Charging Year							Fourth Charging Year							Fifth Charging Year					
Return on Capital =	Average RCV in Third Charging Year * Bid WACC * Applicable Change in Revenue RPI for the Third Charging Year						Return on Capital =	Average RCV in Fourth Charging Year * Bid WACC * Applicable Change in Revenue RPI for the Fourth Charging Year						Return on Capital =	Average RCV in Fifth Charging Year * Bid WACC * Applicable Change in Revenue RPI for the Fifth Charging Year					

	=	720.4	*2.497%	*	265.5 / 256.7		=	1,226.3	*2.497%*	275.8 / 256.7		=	1,762.2	*2.497%	*	284.6 / 256.7
	=	18.6	(£m)				=	32.9	(£m)			=	48.8	(£m)		

Liquidity

Third Charging Year							Fourth Charging Year												
Liquidity =	(Forecast average RCV in year 4 - Average RCV in year 3) * Bid WACC * Applicable Change in Revenue RPI for the Third Charging Year						Liquidity =	(Forecast average RCV in year 5 - Average RCV in year 4) * Bid WACC * Applicable Change in Revenue RPI for the Fourth Charging Year						Liquidity =	(Forecast average RCV in year 6 - Average RCV in year 5) * Bid WACC * Applicable Change in Revenue RPI for the Fifth Charging Year					

	=	505.9	*2.497%	*	265.5 / 256.7		=	535.9	*2.497%*	275.8 / 256.7		=	533.9	*2.497%	*	284.6 / 256.7
	=	13.1	(£m)				=	14.4	(£m)			=	14.8	(£m)		

Opex

In line with Tideway's licence, the Opex building block is zero as all costs are accounted for as capital expenditure. Therefore, no reconciliation is required.

Financing Cost Adjustment

The Financing Cost Adjustment does not rely on any forecast inputs and therefore a reconciliation for actuals and updated forecasts is not required.
The Financing Cost Adjustment is non-zero in the Fourth and subsequent Charging Years. Where the Financing Cost Adjustment is non-zero, it is included in both the calculation and recalculation and so nets out to zero and has no impact on the BBRA.

Tax

In line with Tideway's licence, the tax building block is zero as Tideway is not required to pay corporation tax or any other income-based tax.

Additional Return on Capital and Additional Liquidity

These building blocks will only apply if spend exceeds the Threshold Outturn and Tideway has made an IAR Overrun Application.
Therefore this building block is zero for the purposes of this calculation.

Recalculated Allowed Revenue

Tideway Allowed Revenue (t) =   Return on capital + Liquidity + Operating expenditure + Financing cost adjustment + Tax + Additional return on capital + Additional liquidity

(excludes the building block reconciliation adjustment and revenue adjustment building blocks, which are not subject to reconciliation)
(when the financing cost adjustment is non-zero, it is included in both the calculation and the recalculation, so has no net impact on the Building Block Reconciliation Adjustment)

The calculation of these building blocks is as described above. This results in the following recalculated Allowed Revenue for 2016/17, 2017/18 and 2018/19:

Tideway Allowed Revenue (Third Charging Year)	=	18.6	+ 13.1	+ 0	+ 0	+ 0	+ 0	+ 0
	=	31.7	(£m)					
Tideway Allowed Revenue (Fourth Charging Year)	=	32.9	+ 14.4	+ 0	0.5	+ 0	+ 0	+ 0
	=	47.7	(£m)					
Tideway Allowed Revenue (Fifth Charging Year)	=	48.8	+ 14.8	+ 0	-1.0	+ 0	+ 0	+ 0
	=	62.6	(£m)					

Additional Return on Capital

The Additional Return on Capital building block will only apply if spend exceeds the Threshold Outturn and Tideway has made an IAR Overrun Application.
Therefore this building block is zero for the purposes of this calculation.

Additional Liquidity

The Additional Return on Capital building block will only apply if spend exceeds the Threshold Outturn and Tideway has made an IAR Overrun Application.
Therefore this building block is zero for the purposes of this calculation.

Inputs 2019

	Unit	Source/notes	2012/13	2013/14	2014/15	First Charging Year 2015/16	Second charging year 2016/17	Third Charging Year 2017/18	Fourth Charging Year 2018/19	Fifth Charging Year 2019/20	Sixth Charging Year 2020/21	Seventh Charging Year 2021/22	Eighth Charging Year 2022/23	Ninth Charging Year 2023/24
Year starts						01/04/2015	01/04/2016	01/04/2017	01/04/2018	01/04/2019	01/04/2020	01/04/2021	01/04/2022	01/04/2023
Year ends						31/03/2016	31/03/2017	31/03/2018	31/03/2019	31/03/2020	31/03/2021	31/03/2022	31/03/2023	31/03/2024
Year t-2						2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Year t-1						2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Year t						2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
Year t+1						2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Year t+2						2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26

1.1 2014/15 RPI Adjustment Factor

	Unit	Source/notes								Fifth 2019/20	Sixth 2020/21	Seventh 2021/22	Eighth 2022/23	Ninth 2023/24
Forecast RPI Adjustment Factor for the calendar year in which Charging Year commences	%	*Source: Average independent new forecasts for RPI, Table M3, "Forecasts for the UK economy: a comparison of independent forecasts", HM Treasury, August 2019. Required by Project Licence Appendix 1, 1.1 (i), (ii), (iii)*								2.7%	2.8%	3.0%	3.2%	3.2%
Forecast RPI Adjustment Factor for the calendar year in which Charging Year ends	%	*Source: Average independent new forecasts for RPI, Table M3, "Forecasts for the UK economy: a comparison of independent forecasts", HM Treasury, August 2019. Required by Project Licence Appendix 1, 1.1 (i), (ii), (iii)*								2.8%	3.0%	3.2%	3.2%	
RPI, September of Charging Year		*Source: RPI (All Items) index, Consumer Price Inflation Reference Tables, Table 36, 16 October 2019, Office for National Statistics. Required by Project Licence Appendix 1, 1.1 (iii)*			257.6	259.6	264.9	275.1	284.1	291.0				
RPI, March of Charging Year		*Source: RPI (All Items) index, Consumer Price Inflation Reference Tables, Table 36, 16 October 2019, Office for National Statistics. Required by Project Licence Appendix 1, 1.1 (iii)*		254.8	257.1	261.1	269.3	278.3	285.1					

Applicable Change in Revenue RPI

	Unit	Source/notes												
RPIt (RPI for November in Charging Year Yt-1)		*Source: RPI (All Items) index, Consumer Price Inflation Reference Tables, Table 36, 18 December 2019, Office for National Statistics. Required by Project Licence Appendix 1, Part A 3, 4 and 6. Note: for both First and Second Charging years, stated RPI is for November 2015, as Allowed Revenue for both these years is being calculated together*			245.6	252.1	259.8	259.8	265.5	275.8	284.6	291.0		
Year average RPI		*Source: Calculated from RPI (All Items) index, Consumer Price Inflation Reference Tables, Table 36, 15 October 2019 Office for National Statistics. Required by Project Licence Appendix 1, Part A 3, 4 and 6 and Appendix 1, 1.1 (iv)*			256.7	259.4	265.0	274.9	283.3					

A.3. Return on Capital and A.4 Liquidity

	Unit	Source/notes												
Water Services Regulation Authority Stated RCV (2014/15 Prices) at 31 March	2014/15 prices, £	*Source: RCV-Bazalgette-2019-publ.xls, published by Ofwat on 16 July 2019. Zero prior to licence award. Required by Project Licence Appendix 1, Part A 3*		0	0	148,741,346	478,533,658	962,316,426	1,490,337,315					

Allowable Project Spend (actual and forecast) - as at October 2019

	Unit	Source/notes												
Annual Actual Project Spend	Outturn prices, £	*Source: "ITA Verification No. 37.pdf". Required by Project Licence Appendix 1, Part A 3*			0	150,344,662	340,489,147	518,165,900	582,828,772	224,031,449				
Estimated Allowable Project Spend	Outturn prices, £	*Source: "Regulation Reporting Sep 19". Required by Project Licence Appendix 1, Part A 3*			0	0	0	0	0	58,140,795				
Forecast Allowable Project Spend	Outturn prices, £	*Source: "2019 Revenue Statement - ITA Expenditure Forecast Review Q2 - Issued Rev1.pdf" for full-year 2019/20, 2020/21 and 2021/22 forecast. The 2019/20 figure is net of expenditure already realised (April to September) as reflected in Annual Actual Project Spend and Estimated Allowable Project Spend. Required by Project Licence Appendix 1, Part A 3, 4*			0	0	0	0	0	338,668,378	615,408,320	466,716,560		
Excluded Project Spend	Outturn prices, £	*Source: In line with the reported year end and interim statutory financial statements. Note : 2019/20 for information - relates to the period incurred to September i.e. Apr - Sept.*				64,394,743	87,615,825	108,108,556	80,287,259	32,156,645				
Alliance Agreement receipts - expenditure funded by these receipts is treated as Excluded Project Spend and therefore is excluded from the Allowable spend metrics set out above	Outturn prices, £	*Source: Head of Commercial, Tideway. Notes: Zero prior to Licence award. Required by Project Licence Appendix 2, 1.5*			0	0	0	0	0	0	0			
BWACC	%	*Source: Project Licence, Appendix 1, 1.18. Required by Project Licence Appendix 1, Part A 3, 4, 6, 7, 8*				2.497%								

A.5. Opex

	Unit	Source/notes												
Opex forecast as at October 2019	Outturn prices, £	*Note: In line with the Project Licence, zero as all expenditure treated as capex. Required by Project Licence Appendix 1, Part A 5*				0	0	0	0	0	0			

A.6. Financing Cost Adjustment

	Unit	Source/notes												
Financing Cost Adjustment Index Yield - 12 months trailing average at 31 March	%	*Source: "FCA yield calculation 2018.19.xlsx". Calculated with reference to iBoxx BBB data and spot implied inflation rates for 10 year maturity from Bank of England. Required by Project Licence Appendix 1, Part A 6*				1.30%	1.43%	0.35%	0.01%	0.23%				
Water Services Regulation Authority Adjusted RCV (Current Prices) at 31 March	Current prices at 31 March of Charging Year	*Source: RCV-Bazalgette-2019-publ.xls, published by Ofwat on 16 July 2019. Zero prior to licence award. Required by Project Licence Appendix 1, Part A 3*	0	0	0	151,310,515	502,087,458	1,043,425,953	1,655,435,722					
Net Debt at 31 March	Current prices at 31 March of Charging Year	*Source: Tideway Annual Report 2018/19 - Regulatory Accounting Statements, under Financing cost adjustment section. Required by Project Licence Appendix 1, Part A 6*	0	0	0	-130,376,913	-315,869,558	-72,091,186	543,155,000					
Notional Debt to RCV ratio	%	*Source: Project Licence Appendix 1, 1.42. Required by Project Licence Appendix 1, Part A 6*				62.5%								

A 1.4. Tax

	Unit	Source/notes												
Tax as at October 2019	Outturn prices, £	*In line with the Project Licence, zero as the IP is not required to pay corporation tax or any other income-based tax. See Project Licence Appendix 1, Part A 1.4*				0	0	0	0	0	0			

A.7. Under/Over Recovered Revenue Adjustment - as at October 2019

	Unit	Source/notes												
		See Project Licence, Appendix 1, Part A.7												
Allowed Revenue	£	*Source: 2015, 2016, 2017 and 2018 updated revised Revenue Statements*				33,603,285	28,559,132	49,235,940	63,431,062					
Amount recovered in respect of 2016/17, 2017/18 and 2018/19 Allowed Revenue (to end of September 2019)	Outturn prices, £	*Source: MTHYTDStatement Consolidated-July-19 Final v2.xlsx and Tideway bank records. Note: Captures all 2016/17, 2017/18 and 2018/19 revenue received by Thames Water prior to the end of September 2019- this is based on revenue collected by Thames Water up to and including July 2019.*				32,767,942	24,767,255	45,739,272						
Amount recovered in respect of Allowed Revenue (to end of September 2018)	Outturn prices, £	*Source: 2018 updated revised Revenue Statement. Note: Captures all 2016/17 and 2017/18 revenue received by Thames Water prior to the end of October 2018, rather than September 2018. The cut-off is the same as that used for the 2018 Revenue Statement ensuring that the amounts received are treated consistently between Revenue Statements. These figures reflect amounts recovered until October 2018 instead of September 2018, as agreed with Ofwat.*				32,230,705	24,198,552							
Years of NPV adjustment		*Represents the number of years of NPV adjustment required - two years for a Charging Year being reconciled for the first time, and one year to reconcile further amounts received in respect of Charging Years already reconciled. See "Statement of Calculation 2019"*				1	1	2						
Amounts received from TWUL in Charging Year (all years of Allowed Revenue)	Outturn prices, £	*Source: MTHYTDStatement Consolidated-July-19 Final v2.xlsx and Tideway bank records. Note: Captures all 2016/17, 2017/18 and 2018/19 revenue received from Thames Water prior to the end of March 2019.*				26,747,386	26,791,391	38,387,688						

A.8. Reconciliation adjustment

	Unit	Source/notes												
		See Project Licence, Appendix 1, Part A 8												
Time since original calculation	Years	*Represents the number of years since revenue was first calculated to feed into the NPV adjustment of the reconciliation adjustment.*				4	4	3	2	1	0			
Reconcile this year?		*Revenue for a given Charging Year is subject to building block reconciliation adjustment where estimated or forecast expenditure or inflation inputs were used the last time that year's revenue was calculated. Defined as follows: 1 = yes, 0= no*				0	0	1	1	1	0			
Allowed Revenue as per most recently submitted Revenue Statement (excluding building block reconciliation and under/over recovered revenue adjustment)	£	*Source: 2018 updated revised Revenue Statement, excluding building block reconciliation and under/over recovered revenue adjustment*				8,085,476	18,208,619	31,902,004	48,422,229	62,470,343				

A.11. Additional Return on Capital Building Block

	Unit	Source/notes												
Additional Allowable Project Spend		*Not applicable at present. Inputs to be added if this building block becomes relevant (i.e. if Tideway makes an IAR Overrun Application to increase Allowable Project Spend above the Threshold Outturn). See Project Licence, Appendix 1, Part A 11*												

Calculation 2019

Building Block	Unit	Notes/description	2013/14	2014/15	First Charging Year 2015/16	Second Charging Year 2016/17	Third Charging Year 2017/18	Fourth Charging Year 2018/19	Fifth Charging Year 2019/20	Sixth Charging Year 2020/21
Year starts					01/04/2015	01/04/2016	01/04/2017	01/04/2018	01/04/2019	01/04/2020
Year ends					31/03/2016	31/03/2017	31/03/2018	31/03/2019	31/03/2020	01/04/2021
Year t-2					2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Year t-1					2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
Year t					2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Year t+1					2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Year t+2					2017/18	2018/19	2019/20	2020/21	2021/22	2022/23

1.1 2014/15 RPI Adjustment Factor — *A factor calculated for each Charging Year to express costs associated with that year in a 2014/15 price base. See Project Licence, Appendix 1, 1.1*

(a) for the purposes of calculating Forecast Allowable Project Spend for Charging Year Yt+1, estimated Allowable Project Spend for the said Charging Year shall be deflated from a price base in Charging Year Yt+1 to the Base RPI Index year (I2014/15), using an adjustment factor derived from multiplying the factors set out in (i), (ii), (iii) and (iv) below:

Building Block	Unit	Notes/description	Value
Forecast RPI Adjustment Factor for the calendar year in which Charging Year Yt+1 commences	%	*Forecast RPI - see input sheet for description of source*	3.0%
Forecast RPI Adjustment Factor for the calendar year in which Charging Year Yt+1 ends	%	*Forecast RPI - see input sheet for description of source*	3.2%
Forecast RPI Adjustment Factor for the calendar year in which Charging Year Yt commences	%	*Forecast RPI - see input sheet for description of source*	2.8%
Forecast RPI Adjustment Factor for the calendar year in which Charging Year Yt ends	%	*Forecast RPI - see input sheet for description of source*	3.0%
Percentage movement in the RPI (All Items) index as published by Office for National Statistics for the period April to September in the calendar year in which Charging Year Yt-1 commenced	%	*Calculated with reference to the index values for March and September to capture April to September inflation (see detailed modelling assumptions in "Statement of calculation 2019")*	2.1%
Forecast RPI Adjustment Factor for the calendar year in which Charging Year Yt-1 commenced	%	*Forecast RPI - see input sheet for description of source*	2.7%
Forecast RPI Adjustment Factor for the calendar year in which Charging Year Yt-1 ends	%	*Forecast RPI - see input sheet for description of source*	2.8%
Base RPI		*Year average RPI for 2014/15, used as base year RPI*	256.7
Charging Year Yt-2, or where this is on or before Base RPI Index year, 2014/15		*Year average RPI for Charging year T-2 (or 2014/15 where this is later)*	283.3
1.1 (i)		*Factor used to adjust prices from Charging Year T+1 to Charging Year T*	1.03
1.1 (ii)		*Factor used to adjust prices from Charging Year T to Charging Year T-1*	1.03
1.1 (iii)		*Factor used to adjust prices from Charging Year T-1 to Charging Year T-2*	1.03
1.1 (iv)		*Factor used to adjust prices from Charging Year T-2 to Base RPI Index year*	1.10
RPI Adjustment Factor Charging Year T+1		*Combines factors (i), (ii), (iii) and (iv) above to calculate factor used to adjust prices from Charging Year T+1 to 2014/15 price base.*	1.21
RPI Adjustment Factor Charging Year T		*Combines factors (ii), (iii) and (iv) above to calculate factor used to adjust prices from Charging Year T to 2014/15 price base.*	1.17
RPI Adjustment Factor Charging Year T-1		*Combines factors (iii) and (iv) above to calculate factor used to adjust prices from Charging Year T-1 to 2014/15 price base.*	1.14
RPI Adjustment Factor Charging Year T-2		*Equal to factor (iv) above - used to adjust prices from Charging Year T-2 to 2014/15 price base.*	1.10

Building Block	Unit	Notes/description	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Applicable Change in Revenue RPI		*RPI in November of previous Charging Year relative to 2014/15 base year*	0.96	0.98	1.01	1.01	1.03	1.07	1.11	1.13
RPIt		*RPI in November of Charging Year T-1*	245.6	252.1	259.8	259.8	265.5	275.8	284.6	291.0
RPIbase (Base RPI Index)		*Average RPI for 2014/15*	256.7	256.7	256.7	256.7	256.7	256.7	256.7	256.7

Building Block	Unit	Notes/description	Value
A.1. Allowed Revenue	£	*Total Allowed Revenue calculated as the total of the building blocks below, in accordance with Project Licence, Appendix 1, 1.4. See Statement of calculation 2019 for further detail.*	76,465,429
A.3. Return on Capital	£	*The Return on Capital building block allows the IP to earn a return on capital in relation to the forecast average RCV in the Charging Year in question. See Project Licence, Appendix 1, Part A 3*	65,002,510
Ofwat Stated RCV for Yt-2	£, 2014/15 prices	*RCV at the end of Charging Year T-2 as published by Ofwat by 1 September following the end of the Charging Year*	1,490,337,315
OPRCV Yt-1	£, 2014/15 prices	*Opening RCV for Charging Year T-1.*	1,490,337,315
2014/15 RPI Adjustment Factor Yt-1		*Scalar to adjust forecast costs for Charging Year T-1 to 2014/15 price base*	1.14
Annual Actual Project Spend Yt-1	£, 2014/15 prices	*Allowable Project Spend (verified by the ITA) incurred in Charging Year T-1*	196,205,834
Estimated Allowable Project Spend Yt-1	£, 2014/15 prices	*Allowable Project Spend (not verified by the ITA) incurred in Charging Year T-1*	50,919,472
Forecast Allowable Project Spend Yt-1	£, 2014/15 prices	*Allowable Project Spend forecast to be incurred in Charging Year T-1*	296,604,392
OPRCV Yt	£, 2014/15 prices	*Opening RCV for Charging Year T - the sum of opening RCV for Charging year T-1 and all Allowable Project Spend in that year*	2,034,067,013
2014/15 RPI Adjustment Factor Yt		*Scalar to adjust forecast costs for Charging Year T to 2014/15 price base*	1.17
Annual Actual Project Spend Yt	£, 2014/15 prices	*Allowable Project Spend (verified by the ITA) incurred in Charging Year T*	0
Estimated Allowable Project Spend Yt	£, 2014/15 prices	*Allowable Project Spend (not verified by the ITA) incurred in Charging Year T*	0
Forecast Allowable Project Spend Yt	£, 2014/15 prices	*Allowable Project Spend to be incurred in Charging Year T*	524,037,054
CPRCV Yt	£, 2014/15 prices	*Closing RCV for Charging Year T - the sum of opening RCV for Charging Year T and all Allowable Project Spend in that year*	2,558,104,068
YARCV Yt	£, 2014/15 prices	*Year average RCV for Charging Year T*	2,296,085,540
A.4. Liquidity	£	*The Liquidity building block allows the IP a liquidity allowance (return on capital) in relation to the incremental average RCV in the year following the Charging Year in question. See Project Licence, Appendix 1, Part A 4*	12,876,817
OPRCV Yt+1	£, 2014/15 prices	*Opening RCV for Charging Year T+1*	2,558,104,068
2014/15 RPI Adjustment Factor Yt+1		*Scalar to adjust forecast costs for Charging Year T+1 to 2014/15 price base*	1.21
Forecast Allowable Project Spend for year t+1	£, 2014/15 prices	*Allowable Project Spend forecast to be incurred in Charging Year T+1*	385,659,339
CPRCV Yt+1	£, 2014/15 prices	*Closing RCV for Charging Year T+1*	2,943,763,402
FYARCV Yt+1	£, 2014/15 prices	*Average RCV for Charging Year T+1*	2,750,933,735
A.5. Opex		*In line with the Project Licence, the Opex building block is zero as all costs are accounted for as capital expenditure. See Project Licence, Part A 5*	0

Building Block	Unit	Notes/description	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
A.6. Financing Cost Adjustment building block		*The Financing Cost Adjustment building block is intended to protect against movements in the market cost of debt, by comparing a measure of financing costs at an annual reference point to a base reference point of March 2015. See Project Licence, Appendix 1, Part A 6*					0	461,614	-1,016,891	-3,201,092
Financing Cost Adjustment Yt					0	0	0	461,614	-1,478,505	-2,184,201
Financing Cost Adjustment Index Yield	%	*See Project Licence Appendix 1, Part A 6.3*	1.30%	1.43%	0.35%	0.01%	0.23%			
Base Reference Point (BRP)	%	*The historic 12 months' trailing average of the Financing Cost Adjustment Index Yield as at 31 March 2015*	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%
Annual Reference Point (ARP)	%	*The historic 12 months' trailing average of the Financing Cost Adjustment Index Yield as at 31 March of Charging Year Yt-2*	1.30%	1.30%	1.43%	0.35%	0.01%	0.23%		
BRP-ABP	%	*Difference between BRP and ARP*	0.00%	0.00%	-0.13%	0.95%	1.29%	1.07%		
Market Cost of Debt Adjustment Factor (absolute)	%	*See Project Licence Appendix 1 Part A 6.7*	0.00%	0.00%	0.00%	0.22%	0.54%	0.32%		
Market Cost of Debt Adjustment Factor (corrected sign)	%	*See Project Licence Appendix 1 Part A 6.7*	0.00%	0.00%	0.00%	-0.22%	-0.54%	-0.32%		
Net Debt in Charging Year Yt-2	£, current prices (March of Charging Year T-2)	*Net Debt at the end of Charging Year T-2 as defined in Project Licence Appendix 1, 1.41*	0	0	-130,376,913	-315,869,558	-72,091,186	543,155,000		
Water Services Regulation Authority Adjusted RCV (Current Prices) in Charging Year Yt-2	£, current prices (March of Charging Year T-2)	*RCV at the end of Charging Year T-2 in then current prices*	0	0	151,310,515	502,087,458	1,043,425,953	1,655,435,722		
Notional Debt to RCV Ratio	%	*As defined in Project Licence Appendix 1, 1.42*	62.5%	62.5%	62.5%	62.5%	62.5%	62.5%		
Notional Net Debt in Charging Year Yt-2	£, current prices (March of Charging Year T-2)	*RCV multiplied by Notional Debt to RCV ratio. See Project Licence Appendix 1 Part A 6.9*	0	0	94,569,072	313,804,661	652,141,221	1,034,647,326		
Net Debt in Charging Year Yt-3	£, current prices (March of Charging Year T-3)	*Net Debt at the end of Charging Year T-3 as defined in Project Licence Appendix 1, 1.41*	0	0	-130,376,913	-315,869,558	-72,091,186			
Water Services Regulation Authority Adjusted RCV (Current Prices) in Charging Year Yt-3	£, current prices (March of Charging Year T-3)	*RCV at the end of Charging Year T-3 in then current prices*	0	0	0	151,310,515	502,087,458	1,043,425,953		
Notional Debt to RCV Ratio	%	*As defined in Project Licence Appendix 1, 1.42*	62.5%	62.5%	62.5%	62.5%	62.5%	62.5%		
Notional Net Debt in Charging Year Yt-3	£, current prices (March of Charging Year T-3)	*RCV multiplied by Notional Debt to RCV ratio. See Project Licence Appendix 1 Part A 6.9*	0	0	0	94,569,072	313,804,661	652,141,221		
Applicable Change in Revenue RPI for Charging Year Yt			1.01	1.01	1.03	1.07	1.11	1.13		
Applicable Change in Revenue RPI for Charging Year Yt-2			0.96	0.98	1.01	1.01	1.03	1.07		

Building Block	Unit	Notes/description	Value
A.1.4. Tax	£	*In line with the Project Licence, zero as the IP is not required to pay corporation tax or any other income-based tax. See Project Licence Appendix 1, Part A 1.4*	0
A.7. Under/Over Recovered Revenue Adjustment	£	*The revenue adjustment building block is to reconcile for under/over recovered Allowed Revenue in previous Charging Years. See Project Licence, Appendix 1, Part A.7*	2,716,880

Building Block	Unit	Notes/description	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Allowed Revenue		*Allowed Revenue as submitted in 2015, 2016 and 2017 updated revised Revenue Statement*	33,603,285	28,559,132	49,235,940			
Amount recovered in respect of Allowed Revenue (to end of September 2019)		*Amount collected by Thames Water and received by Tideway in respect of 2016/17, 2017/18 and 2018/19 Allowed Revenue, prior to the end of September 2019.*	32,767,942	24,767,255	45,739,272			
Amount recovered in respect of Allowed Revenue (to end of September 2018)	£	*Amount collected by Thames Water and received by Tideway in respect of 2016/17 and 2017/18 Allowed Revenue, prior to the end of October 2018. The cut-off is the same as that used for the 2018 Revenue Statement ensuring that the amounts received are treated consistently between Revenue Statements.*	32,230,705	24,198,552				
Applicable Change in Revenue RPI		*RPI in November of previous Charging Year relative to 2014/15 base year*	1.01	1.03	1.07	1.11	1.13	
Years of NPV adjustment		*Represents the number of years of NPV adjustment required - two years for a Charging Year being reconciled for the first time, and one year to reconcile further amounts received in respect of Charging Years already reconciled. See "Statement of Calculation 2019"*	1	1	2			
Amounts in respect of prior Charging Years not yet reconciled (unadjusted)		*Further amounts received in respect of Charging Years that have already been reconciled.*	537,237	568,703				
Reconciliation amounts - Charging Year T-2 (unadjusted)		*Difference between Allowed Revenue for a Charging Year and the amount collected by Thames Water and received by Tideway in respect of that Allowed Revenue.*			3,496,668			
Reconciliation amounts (NPV-adjusted)		*Reconciliation amount as calculated above, NPV-adjusted for the delay between the original Charging Year and the year of reconciliation using the BWACC and Applicable Change in Revenue RPI.*	-563,035	-596,012	3,875,926			

Building Block	Unit	Notes/description	Value
A.8. Reconciliation adjustment	£	*Reconciliation for updated expenditure and inflation data to reflect realised actuals and updated forecasts. See Project Licence, Appendix 1, Part A 8*	-929,686

Building Block	Unit	Notes/description	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Reconcile this year?	n/a	*Revenue for a given Charging Year is subject to building block reconciliation adjustment where estimated or forecast expenditure or inflation inputs were used the last time that year's revenue was calculated. Defined as follows: 1 = yes, 0= no*	0	1	1	1	0	
Time since original calculation	years	*Represents the number of years since revenue was first calculated to feed into the NPV adjustment of the reconciliation adjustment.*	4	3	2	1	0	
Allowed Revenue (as at October 2019)	£	*Allowed Revenue recalculated using updated expenditure and inflation data. Excludes the under/over recovered revenue adjustment and the reconciliation adjustment building blocks, as these building blocks are not subject to reconciliation. See BBRA Calculation 2016, BBRA Calculation 2017 and BBRA Calculation 2018.*	31,675,235	47,743,966	62,556,010			
Allowed Revenue (as at October 2018)	£	*Allowed Revenue as submitted in 2018 updated revised Revenue Statement. Excludes the under/over recovered revenue adjustment and the reconciliation adjustment building blocks, as these building blocks are not subject to reconciliation.*	31,902,004	48,422,229	62,470,343			
Applicable Change in Revenue RPI (year in which original calculation was made)			1.03	1.07	1.11	1.13		
Reconciliation amounts (unadjusted)	£	*Adjustment calculated as difference between updated calculation and previous year's calculation, prior to NPV adjustment.*	-226,770	-678,263	85,668			
Reconciliation amounts (NPV-adjusted)	£	*Adjustment calculated as difference between updated calculation and previous year's calculation, post NPV-adjustment using BWACC and Applicable Change in Revenue RPI.*	-267,637	-751,830	89,781			

Building Block	Unit	Notes/description
A.11. Additional Return on Capital Building Block	£	*Not applicable. To be added to calculation if building block becomes relevant (i.e. if Tideway makes an IAR Overrun Application to increase Allowable Project Spend above the Threshold Outturn). See Project Licence, Appendix 1, Part A 11*
A.11. Additional Liquidity Building Block	£	*Not applicable. To be added to calculation if building block becomes relevant (i.e. if Tideway makes an IAR Overrun Application to increase Allowable Project Spend above the Threshold Outturn). See Project Licence, Appendix 1, Part A 11*

BBRA Inputs 2018

	Unit	Source/notes	2012/13	2013/14	2014/15	First Charging Year 2015/16	Second charging year 2016/17	Third Charging Year 2017/18	Fourth Charging Year 2018/19	Fifth Charging Year 2019/20	Sixth Charging Year 2020/21	Seventh Charging Year 2021/22	Eighth Charging Year 2022/23
Year starts						01/04/2015	01/04/2016	01/04/2017	01/04/2018	01/04/2019	01/04/2020	01/04/2021	01/04/2022
Year ends						31/03/2016	31/03/2017	31/03/2018	31/03/2019	31/03/2020	31/03/2021	31/03/2022	31/03/2023
Year t-2						2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Year t-1						2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Year t						2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Year t+1						2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
Year t+2						2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25

1.1 2014/15 RPI Adjustment Factor

	Unit	Source/notes	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Forecast RPI Adjustment Factor for the calendar year in which Charging Year commences	%	UPDATED FOR RECONCILIATION Source: Average independent new forecasts for RPI, Table M3, "Forecasts for the UK economy: a comparison of independent forecasts", HM Treasury, August 2019 Required by Project Licence Appendix 1, 1.1 (i), (ii), (iii)								2.7%	2.8%	3.0%	3.2%
Forecast RPI Adjustment Factor for the calendar year in which Charging Year ends	%	UPDATED FOR RECONCILIATION Source: Average independent new forecasts for RPI, Table M3, "Forecasts for the UK economy: a comparison of independent forecasts", HM Treasury, August 2019 Required by Project Licence Appendix 1, 1.1 (i), (ii), (iii)								2.8%	3.0%	3.2%	
RPI, September of Charging Year		UPDATED FOR RECONCILIATION Source: RPI (All Items) index, Consumer Price Inflation Reference Tables, Table 36, 16 October 2019, Office for National Statistics. Required by Project Licence Appendix 1, 1.1 (iii)			257.6	259.6	264.9	275.1	284.1	291.0			
RPI, March of Charging Year		UPDATED FOR RECONCILIATION Source: RPI (All Items) index, Consumer Price Inflation Reference Tables, Table 36, 16 October 2019, Office for National Statistics. Required by Project Licence Appendix 1, 1.1 (iii)		254.8	257.1	261.1	269.3	278.3	285.1				

Applicable Change in Revenue RPI

	Unit	Source/notes	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
RPIt (RPI for November in Charging Year Yt-1)		Source: RPI (All Items) index, Consumer Price Inflation Reference Tables, Table 36, 19 December 2018, Office for National Statistics. Required by Project Licence Appendix 1, Part A 3, 4 and 6 Note: for both First and Second Charging years, stated RPI is for November 2015, as Allowed Revenue for both these years is being calculated together			245.6	252.1	259.8	259.8	265.5	275.8	284.6		
Year average RPI		UPDATED FOR RECONCILIATION Source: Calculated from RPI (All Items) index, Consumer Price Inflation Reference Tables, Table 36, 15 October 2019 Office for National Statistics Required by Project Licence Appendix 1, Part A 3, 4 and 6 and Appendix 1, 1.1 (iv)				256.7	259.4	265.0	274.9	283.3			

A.3. Return on Capital and A.4 Liquidity

	Unit	Source/notes	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Water Services Regulation Authority Stated RCV (2014/15 Prices) at 31 March	2014/15 prices, £	Source: Regulatory Capital Values - Bazalgette Tunnel Limited (Tideway), 1 August 2018 Required by Project Licence Appendix 1, Part A 3		0	0	148,741,346	478,533,658	962,316,426					

Allowable Project Spend (actual and forecast) - as at October 2019

	Unit	Source/notes	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Annual Actual Project Spend	Outturn prices, £	UPDATED FOR RECONCILIATION Source: "ITA Verification No. 37.pdf" Required by Project Licence Appendix 1, Part A 3			0	150,344,662	340,489,147	518,165,900	582,828,772	224,031,449			
Estimated Allowable Project Spend	Outturn prices, £	UPDATED FOR RECONCILIATION Source: "Regulation Reporting Sep 19" Required by Project Licence Appendix 1, Part A 3			0	0	0	0	0	58,140,795			
Forecast Allowable Project Spend	Outturn prices, £	UPDATED FOR RECONCILIATION Source: "2019 Revenue Statement - ITA Expenditure Forecast Review Q2 - Issued Rev1.pdf" for full-year 2019/20, 2020/21 and 2021/22 forecast. The 2019/20 figure is net of expenditure already realised (April to September) as reflected in Annual Actual Project Spend and Estimated Allowable Project Spend. Required by Project Licence Appendix 1, Part A 3, 4			0	0	0	0	0	338,666,378	615,408,320		
Excluded Project Spend	Outturn prices, £	Data removed as not required for reconciliation purposes. See "Inputs 2019".											
Alliance Agreement receipts - expenditure funded by these receipts is treated as Excluded Project Spend and therefore is excluded from the Allowable spend metrics set out above	Outturn prices, £	Data removed as not required for reconciliation purposes. See "Inputs 2019".											
BWACC	%	Source: Project Licence, Appendix 1, 1.18 Required by Project Licence Appendix 1, Part A 3, 4, 6, 7, 8				2.497%							

A.5. Opex

	Unit	Source/notes	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Opex forecast as at October 2019	Outturn prices, £	Note: In line with the Project Licence, zero as all expenditure treated as capex. Required by Project Licence Appendix 1, Part A 5				0	0	0	0	0			

A.6. Financing Cost Adjustment

	Unit	Source/notes	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Financing Cost Adjustment Index Yield - 12 months trailing average at 31 March	%	Source: "FCA yield calculator.xlsx" Calculated with reference to iBoxx BBB data and spot implied inflation rates for 10 year maturity from Bank of England. Required by Project Licence Appendix 1, Part A 6			1.30%	1.43%	0.35%	0.01%					
Water Services Regulation Authority Adjusted RCV (Current Prices) at 31 March	Current prices at 31 March of Charging Year	Source: Regulatory Capital Values - Bazalgette Tunnel Limited (Tideway), 1 August 2018 Required by Project Licence Appendix 1, Part A 3		0	0	0	151,310,515	502,087,458	1,043,425,953				
Net Debt at 31 March	Current prices at 31 March of Charging Year	Source: Tideway financial statements as at 31 March 2018 Required by Project Licence Appendix 1, Part A 6		0	0	0	-130,376,913	-315,869,558	-72,091,186				
Notional Debt to RCV ratio	%	Source: Project Licence Appendix 1, 1.42 Required by Project Licence Appendix 1, Part A 6				62.5%							

A 1.4. Tax

	Unit	Source/notes	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Tax as at October 2019	Outturn prices, £	In line with the Project Licence, zero as the IP is not required to pay corporation tax or any other income-based tax. See Project Licence Appendix 1, Part A 1.4				0	0	0	0	0			

A.7. Under/Over Recovered Revenue Adjustment - as at October 2018

	Unit	Source/notes
		See Project Licence, Appendix 1, Part A.7
Allowed Revenue	£	Data removed as not required for reconciliation purposes. See "Inputs 2019".
Amount recovered in respect of Allowed Revenue (to end of September 2018)	Outturn prices, £	Data removed as not required for reconciliation purposes. See "Inputs 2019".
Years of NPV adjustment		Data removed as not required for reconciliation purposes. See "Inputs 2019".
Amounts received from TWUL in Charging Year (all years of Allowed Revenue)	Outturn prices, £	Data removed as not required for reconciliation purposes. See "Inputs 2019".

A.8. Reconciliation adjustment

	Unit	Source/notes
		See Project Licence, Appendix 1, Part A 8
Time since original calculation	Years	Data removed as not required for reconciliation purposes. See "Inputs 2019".
Reconcile this year?		Data removed as not required for reconciliation purposes. See "Inputs 2019".
Allowed Revenue as per most recently submitted Revenue Statement (excluding building block reconciliation)	£	Data removed as not required for reconciliation purposes. See "Inputs 2019".

A.11. Additional Return on Capital Building Block

	Source/notes
Additional Allowable Project Spend	Not applicable at present. Inputs to be added if this building block becomes relevant (i.e. if Tideway makes an IAR Overrun Application to increase Allowable Project Spend above the Threshold Outturn). See Project Licence, Appendix 1, Part A 11

A 1.6.4. Net Present Value Adjustment

	Source/notes	2015/16
End of first charging year	Last day of the First Charging Year	31/03/2016
Licence Award	Date of Licence award	24/08/2015

BBRA Calculation 2018

Building Block	Unit	Notes/description	2013/14	2014/15	First Charging Year	Second Charging Year	Third Charging Year	Fourth Charging Year	Fifth Charging Year
Year starts					2015/16 01/04/2015	2016/17 01/04/2016	2017/18 01/04/2017	2018/19 01/04/2018	2019/20 01/04/2019
Year ends					31/03/2016	31/03/2017	31/03/2018	31/03/2019	31/03/2020
Year t-2					2013/14	2014/15	2015/16	2016/17	2017/18
Year t-1					2014/15	2015/16	2016/17	2017/18	2018/19
Year t					2015/16	2016/17	2017/18	2018/19	2019/20
Year t+1					2016/17	2017/18	2018/19	2019/20	2020/21
Year t+2					2017/18	2018/19	2019/20	2020/21	2021/22

1.1 2014/15 RPI Adjustment Factor

A factor calculated for each Charging Year to express costs associated with that year in a 2014/15 price base. See Licence, Appendix 1, 1.1

(a) for the purposes of calculating Forecast Allowable Project Spend for Charging Year Yt+1, estimated Allowable Project Spend for the said Charging Year shall be deflated from a price base in Charging Year Yt+1 to the Base RPI Index year ([2014/15]), using an adjustment factor derived from multiplying the factors set out in (i), (ii), (iii) and (iv) below;

Building Block	Unit	Notes/description	Value
Forecast RPI Adjustment Factor for the calendar year in which Charging Year Yt+1 commences	%	Forecast RPI - see input sheet for description of source	2.8%
Forecast RPI Adjustment Factor for the calendar year in which Charging Year Yt+1 ends	%	Forecast RPI - see input sheet for description of source	3.0%
Forecast RPI Adjustment Factor for the calendar year in which Charging Year Yt commences	%	Forecast RPI - see input sheet for description of source	2.7%
Forecast RPI Adjustment Factor for the calendar year in which Charging Year Yt ends	%	Forecast RPI - see input sheet for description of source	2.8%
Percentage movement in the RPI (All Items) index as published by Office for National Statistics for the period April to September in the calendar year in which Charging Year Yt-1 commenced	%	Calculated with reference to the index values for March and September to capture April to September inflation (see detailed modelling assumptions in "Statement of calculation 2019") NEW ROW ADDED FOR RECONCILIATION Calculated with reference to the index values for March and September to capture April to September inflation (see "Statement of Calculation 2019")	2.1%
Percentage movement in the RPI (All Items) index as published by Office for National Statistics for the period April to September in the calendar year in which Charging Year Yt commenced	%		2.1%
Forecast RPI Adjustment Factor for the calendar year in which Charging Year Yt-1 commenced	%	NOT USED FOR RECONCILIATION Forecast RPI - see input sheet for description of source	
Forecast RPI Adjustment Factor for the calendar year in which Charging Year Yt-1 ends	%	NOT USED FOR RECONCILIATION Forecast RPI - see input sheet for description of source	
Base RPI		Year average RPI for 2014/15, used as base year RPI	256.7
Charging Year Yt-2, or where this is on or before Base RPI Index year, 2014/15		Year average RPI for Charging year T-2 (or 2014/15 where this is later)	274.9
Charging Year Yt-1		NEW ROW ADDED FOR RECONCILIATION Year average RPI for Charging Year t-1	283.3
1.1 (i)		Factor used to adjust prices from Charging Year T+1 to Charging Year T	1.03
1.1 (ii)		CALCULATION ALTERED FOR RECONCILIATION Factor used to adjust prices from Charging Year T to Charging Year T-1	1.03
1.1 (iii)		CALCULATION ALTERED FOR RECONCILIATION Factor used to adjust prices from Charging Year T-1 to Charging Year T-2	1.03
1.1 (iv)		Factor used to adjust prices from Charging Year T-2 to Base RPI Index year	1.07
RPI Adjustment Factor Charging Year T+1		Combines factors (i), (ii), (iii) and (iv) above to calculate factor used to adjust prices from Charging Year T+1 to 2014/15 price base.	1.17
RPI Adjustment Factor Charging Year T		Combines factors (ii), (iii) and (iv) above to calculate factor used to adjust prices from Charging Year T to 2014/15 price base.	1.14
RPI Adjustment Factor Charging Year T-1		Combines factors (iii) and (iv) above to calculate factor used to adjust prices from Charging Year T-1 to 2014/15 price base.	1.10
RPI Adjustment Factor Charging Year T-2		Equal to factor (iv) above - used to adjust prices from Charging Year T-2 to 2014/15 price base.	1.07

Building Block	Unit	Notes/description	2013/14	2014/15	First	Second	Third	Fourth	Fifth
Applicable Change in Revenue RPI		RPI in November of previous Charging Year relative to 2014/15 base year	0.96	0.98	1.01	1.01	1.03	1.07	1.11
RPIt		RPI in November of Charging Year T-1	245.6	252.1	259.8	259.8	265.5	275.4	284.6
RPIbase (Base RPI Index)		Average RPI for 2014/15	256.7	256.7	256.7	256.7	256.7	256.7	256.7

Building Block	Unit	Notes/description	Value
A.1. Allowed Revenue	£	Total Allowed Revenue calculated as the total of the building blocks below, in accordance with Project Licence, Appendix 1, 1.4. See Statement of calculation 2019 for further detail.	62,556,010
A.3. Return on Capital	£	The Return on Capital building block allows the IP to earn a return on capital in relation to the forecast average RCV in the Charging Year in question. See Project Licence, Appendix 1, Part A 3	48,790,998
Ofwat Stated RCV for Yt-2	£, 2014/15 prices	RCV at the end of Charging Year T-2 as published by Ofwat by 1 September following the end of the Charging Year	962,316,426
OPRCV Yt-1	£, 2014/15 prices	Opening RCV for Charging Year T-1.	962,316,426
2014/15 RPI Adjustment Factor Yt-1		Scalar to adjust forecast costs for Charging Year T-1 to 2014/15 price base	1.10
Annual Actual Project Spend Yt-1	£, 2014/15 prices	Allowable Project Spend (verified by the ITA) incurred in Charging Year T-1	528,020,889
Estimated Allowable Project Spend Yt-1	£, 2014/15 prices	Allowable Project Spend (not verified by the ITA) incurred in Charging Year T-1	0
Forecast Allowable Project Spend Yt-1	£, 2014/15 prices	Allowable Project Spend forecast to be incurred in Charging Year T-1	0
OPRCV Yt	£, 2014/15 prices	Opening RCV for Charging Year T - the sum of opening RCV for Charging year T-1 and all Allowable Project Spend in that year	1,490,337,315
2014/15 RPI Adjustment Factor Yt		Scalar to adjust forecast costs for Charging Year T to 2014/15 price base	1.14
Annual Actual Project Spend Yt	£, 2014/15 prices	Allowable Project Spend (verified by the ITA) incurred in Charging Year T	196,205,834
Estimated Allowable Project Spend Yt	£, 2014/15 prices	Allowable Project Spend (not verified by the ITA) incurred in Charging Year T	50,919,472
Forecast Allowable Project Spend Yt	£, 2014/15 prices	Allowable Project Spend forecast to be incurred in Charging Year T	296,604,392
CPRCV Yt	£, 2014/15 prices	Closing RCV for Charging Year T - the sum of opening RCV for Charging Year T and all Allowable Project Spend in that year	2,034,067,013
YARCV Yt	£, 2014/15 prices	Year average RCV for Charging Year T	1,762,202,164
A.4. Liquidity	£	The Liquidity building block allows the IP a liquidity allowance (return on capital) in relation to the incremental average RCV in the year following the Charging Year in question. See Project Licence, Appendix 1, Part A 4	14,781,904
OPRCV Yt+1	£, 2014/15 prices	Opening RCV for Charging Year T+1	2,034,067,013
2014/15 RPI Adjustment Factor Yt+1		Scalar to adjust forecast costs for Charging Year T+1 to 2014/15 price base	1.17
Forecast Allowable Project Spend for year t+1	£, 2014/15 prices	Allowable Project Spend forecast to be incurred in Charging Year T+1	524,037,054
CPRCV Yt+1	£, 2014/15 prices	Closing RCV for Charging Year T+1	2,558,104,068
FYARCV Yt+1	£, 2014/15 prices	Average RCV for Charging Year T+1	2,296,085,540
A.5. Opex		In line with the Project Licence, the Opex building block is zero as all costs are accounted for as capital expenditure. See Project Licence, Appendix 1, Part A 5	0

Building Block	Unit	Notes/description	2013/14	2014/15	First	Second	Third	Fourth	Fifth
A.6. Financing Cost Adjustment building block		The Financing Cost Adjustment building block is intended to protect against movements in the market cost of debt, by comparing a measure of financing costs at an annual reference point to a base reference point of March 2015. See Project Licence, Appendix 1, Part A 6					0	461,614	-1,016,891
Financing Cost Adjustment Yt					0	0	0	461,614	-1,478,505
Financing Cost Adjustment Index Yield	%	See Project Licence Appendix 1, Part A 6.3	1.30%	1.43%	0.35%	0.01%			
Base Reference Point (BRP)	%	The historic 12 months' trailing average of the Financing Cost Adjustment Index Yield as at 31 March 2015			1.30%	1.30%	1.30%	1.30%	1.30%
Annual Reference Point (ARP)	%	The historic 12 months' trailing average of the Financing Cost Adjustment Index Yield as at 31 March of Charging Year Yt-2			1.30%	1.30%	1.43%	0.35%	0.01%
BRP-ABP	%	Difference between BRP and ARP			0.0%	0.0%	-0.1%	0.9%	1.3%
Market Cost of Debt Adjustment Factor (absolute)	%	See Project Licence Appendix 1 Part A 6.7			0.0%	0.0%	0.0%	0.22%	0.54%
Market Cost of Debt Adjustment Factor (corrected sign)	%	See Project Licence Appendix 1 Part A 6.7			0.0%	0.0%	0.0%	-0.2%	-0.5%
Net Debt in Charging Year Yt-2	£, current prices (March of Charging Year T-2)	Net Debt at the end of Charging Year T-2 as defined in Project Licence Appendix 1, 1.41			0	0	-130,376,913	-315,869,558	-72,091,186
Water Services Regulation Authority Adjusted RCV (Current Prices) in Charging Year Yt-2	£, current prices (March of Charging Year T-2)	RCV at the end of Charging Year T-2 in then current prices			0	0	151,310,515	502,087,458	1,043,425,953
Notional Debt to RCV Ratio	%	As defined in Project Licence Appendix 1, 1.42			62.5%	62.5%	62.5%	62.5%	62.5%
Notional Net Debt in Charging Year Yt-2	£, current prices (March of Charging Year T-2)	RCV multiplied by Notional Debt to RCV ratio. See Project Licence Appendix 1 Part A 6.9			0	0	94,569,072	313,804,661	652,141,221
Net Debt in Charging Year Yt-3	£, current prices (March of Charging Year T-3)	Net Debt at the end of Charging Year T-3 as defined in Project Licence Appendix 1, 1.41			0	0	0	-130,376,913	-315,869,558
Water Services Regulation Authority Adjusted RCV (Current Prices) in Charging Year Yt-3	£, current prices (March of Charging Year T-3)	RCV at the end of Charging Year T-3 in then current prices			0	0	151,310,515	502,087,458
Notional Debt to RCV Ratio	%	As defined in Project Licence Appendix 1, 1.42			62.5%	62.5%	62.5%	62.5%	62.5%
Notional Net Debt in Charging Year Yt-3	£, current prices (March of Charging Year T-3)	RCV multiplied by Notional Debt to RCV ratio. See Project Licence Appendix 1 Part A 6.9			0	0	0	94,569,072	313,804,661
Applicable Change in Revenue RPI for Charging Year Yt					1.01	1.01	1.03	1.07	1.11
Applicable Change in Revenue RPI for Charging Year Yt-2					0.96	0.98	1.01	1.01	1.03

Building Block	Unit	Notes/description	Value
A.1.4. Tax	£	In line with the Project Licence, zero as the IP is not required to pay corporation tax or any other income-based tax See Project Licence Appendix 1, Part A 1.4	0
A.7. Under/Over Recovered Revenue Adjustment	£	REMOVED FROM THIS RECONCILIATION SHEET AS RECONCILED SEPARATELY, AS UNDER/OVER RECOVERED REVENUE IN RELATION TO ALL APPLICABLE CHARGING YEARS IS RECONCILED IN CALCULATION 2019. The revenue adjustment building block is to reconcile for under/over recovered Allowed Revenue in previous Charging Years. See Project Licence, Appendix 1, Part A.7	0
Allowed Revenue		Allowed Revenue as submitted in 2016 updated revised Revenue Statement	
Amount recovered in respect of Allowed Revenue (to end of September 2018)	£	Amount collected by Thames Water and received by Tideway in respect of 2016/17 and 2017/18 Allowed Revenue, prior to the end of September 2018.	
Amount recovered in respect of Allowed Revenue (to end of September 2017)	£	Amount collected by Thames Water and received by Tideway in respect of 2016/17 Allowed Revenue, prior to the end of September 2017.	
Applicable Change in Revenue RPI		RPI in November of previous Charging Year relative to 2014/15 base year	
Years of NPV adjustment		Represents the number of years of NPV adjustment required - two years for a Charging Year being reconciled for the first time, and one year to reconcile further amounts received in respect of Charging Years already reconciled. See "Statement of Calculation 2018"	
Amounts in respect of prior Charging Years not yet reconciled (unadjusted)		Further amounts received in respect of Charging Years that have already been reconciled.	
Reconciliation amounts - Charging Year T-2 (unadjusted)		Difference between Allowed Revenue for a Charging Year and the amount collected by Thames Water and received by Tideway in respect of that Allowed Revenue.	
Reconciliation amounts (NPV-adjusted)		Reconciliation amount as calculated above, NPV-adjusted for the delay between the original Charging Year and the year of reconciliation using the BWACC and Applicable Change in Revenue RPI.	
Allowed Revenue		Allowed Revenue as submitted in 2016 updated revised Revenue Statement	
Amount recovered in respect of Allowed Revenue (to end of September 2018)	£	Amount collected by Thames Water and received by Tideway in respect of 2016/17 and 2017/18 Allowed Revenue, prior to the end of September 2018.	
Amount recovered in respect of Allowed Revenue (to end of September 2017)	£	Amount collected by Thames Water and received by Tideway in respect of 2016/17 Allowed Revenue, prior to the end of September 2017.	
Applicable Change in Revenue RPI		RPI in November of previous Charging Year relative to 2014/15 base year	
Years of NPV adjustment		Represents the number of years of NPV adjustment required - two years for a Charging Year being reconciled for the first time, and one year to reconcile further amounts received in respect of Charging Years already reconciled. See "Statement of Calculation 2018"	
Amounts in respect of prior Charging Years not yet reconciled (unadjusted)		Further amounts received in respect of Charging Years that have already been reconciled.	
Reconciliation amounts - Charging Year T-2 (unadjusted)		Difference between Allowed Revenue for a Charging Year and the amount collected by Thames Water and received by Tideway in respect of that Allowed Revenue.	
Reconciliation amounts (NPV-adjusted)		Reconciliation amount as calculated above, NPV-adjusted for the delay between the original Charging Year and the year of reconciliation using the BWACC and Applicable Change in Revenue RPI.	
A.8. Reconciliation adjustment	£	REMOVED FROM THIS RECONCILIATION SHEET AS RECONCILED IN BBRA CALCULATION 2016 Reconciliation for updated expenditure and inflation data to reflect realised actuals and updated forecasts. See Project Licence, Appendix 1, Part A.8	0
Reconcile this year?	n/a	Revenue for a given Charging Year is subject to building block reconciliation adjustment where estimated or forecast expenditure or inflation inputs were used the last time that year's revenue was calculated. Defined as follows: 1 = yes, 0= no	
Time since original calculation	years	Represents the number of years since revenue was first calculated to feed into the NPV adjustment of the reconciliation adjustment.	
Allowed Revenue (as at October 2018)	£	Allowed Revenue recalculated using updated expenditure and inflation data. Excludes the under/over recovered revenue adjustment and the reconciliation adjustment building blocks, as these building blocks are not subject to reconciliation. See BBRA Calculation 2015, BBRA Calculation 2016 and BBRA Calculation 2017.	
Allowed Revenue (as at October 2017)	£	Allowed Revenue as submitted in 2017 updated revised Revenue Statement. Excludes the under/over recovered revenue adjustment and the reconciliation adjustment building blocks, as these building blocks are not subject to reconciliation.	
Applicable Change in Revenue RPI (year in which original calculation was made) Applicable Change in Revenue RPI (current year)			
Reconciliation amounts (unadjusted)	£	Adjustment calculated as difference between updated calculation and previous year's calculation, prior to NPV adjustment.	
Reconciliation amounts (NPV-adjusted)	£	Adjustment calculated as difference between updated calculation and previous year's calculation, post NPV-adjustment using BWACC and Applicable Change in Revenue RPI.	
A.11. Additional Return on Capital Building Block	£	Not applicable. To be added to calculation if building block becomes relevant (i.e. if Tideway makes an IAR Overrun Application to increase Allowable Project Spend above the Threshold Outturn). See Project Licence, Appendix 1, Part A 11	
A.11. Additional Liquidity Building Block	£	Not applicable. To be added to calculation if building block becomes relevant (i.e. if Tideway makes an IAR Overrun Application to increase Allowable Project Spend above the Threshold Outturn). See Project Licence, Appendix 1, Part A 11	

BBRA Inputs 2017

	Unit	Source/notes	2012/13	2013/14	2014/15	First Charging Year 2015/16	Second charging year 2016/17	Third Charging Year 2017/18	Fourth Charging Year 2018/19	Fifth Charging Year 2019/20	Sixth Charging Year 2020/21	Seventh Charging Year 2021/22
Year starts						01/04/2015	01/04/2016	01/04/2017	01/04/2018	01/04/2019	01/04/2020	01/04/2021
Year ends						31/03/2016	31/03/2017	31/03/2018	31/03/2019	31/03/2020	31/03/2021	31/03/2022
Year t-2						2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
Year t-1						2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Year t						2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Year t+1						2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Year t+2						2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24

1.1 2014/15 RPI Adjustment Factor

	Unit	Source/notes	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Forecast RPI Adjustment Factor for the calendar year in which Charging Year commences	%	UPDATED FOR RECONCILIATION Source: Average independent new forecasts for RPI, Table M3, "Forecasts for the UK economy: a comparison of independent forecasts", HM Treasury, August 2019 Required by Project Licence Appendix 1, 1.1 (i), (ii), (iii)								2.7%	2.8%	3.0%
Forecast RPI Adjustment Factor for the calendar year in which Charging Year ends	%	UPDATED FOR RECONCILIATION Source: Average independent new forecasts for RPI, Table M3, "Forecasts for the UK economy: a comparison of independent forecasts", HM Treasury, August 2019 Required by Project Licence Appendix 1, 1.1 (i), (ii), (iii)								2.8%	3.0%	
RPI, September of Charging Year		UPDATED FOR RECONCILIATION Source: RPI (All Items) index, Consumer Price Inflation Reference Tables, Table 36, 16 October 2019, Office for National Statistics. Required by Project Licence Appendix 1, 1.1 (iii)		257.6	259.6	264.9	275.1	284.1	291.0			
RPI, March of Charging Year		UPDATED FOR RECONCILIATION Source: RPI (All Items) index, Consumer Price Inflation Reference Tables, Table 36, 16 October 2019, Office for National Statistics. Required by Project Licence Appendix 1, 1.1 (iii)		254.8	257.1	261.1	269.3	278.3	285.1			

Applicable Change in Revenue RPI

	Unit	Source/notes	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
RPIt (RPI for November in Charging Year Yt-1)		Source: RPI (All Items) index, Consumer Price Inflation Reference Tables, Table 36, 12 December 2017, Office for National Statistics. Required by Project Licence Appendix 1, Part A 3, 4 and 6 Note: for both First and Second Charging years, stated RPI is for November 2015, as Allowed Revenue for both these years is being calculated together		245.6	252.1	259.8	259.8	265.5	275.8			
Year average RPI		UPDATED FOR RECONCILIATION Source: Calculated from RPI (All Items) index, Consumer Price Inflation Reference Tables, Table 36, 15 October 2019 Office for National Statistics Required by Project Licence Appendix 1, Part A 3, 4 and 6 and Appendix 1, 1.1 (iv)		256.7	259.4	265.0	274.9	283.3				

A.3. Return on Capital and A.4 Liquidity

	Unit	Source/notes	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Water Services Regulation Authority Stated RCV (2014/15 Prices) at 31 March	2014/15 prices, £	Source: Regulatory Capital Values - Bazalgette Tunnel Limited (Tideway), Ofwat, 14 July 2017 Required by Project Licence Appendix 1, Part A 3		0	0	148,741,346	478,533,658					

Allowable Project Spend (actual and forecast) - as at October 2019

	Unit	Source/notes	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Annual Actual Project Spend	Outturn prices, £	UPDATED FOR RECONCILIATION Source: "ITA Verification No. 37.pdf" Required by Project Licence Appendix 1, Part A 3			0	150,344,662	340,489,147	518,165,900	582,828,772	224,031,449		
Estimated Allowable Project Spend	Outturn prices, £	UPDATED FOR RECONCILIATION Source: "Regulation Reporting Sep 19" Required by Project Licence Appendix 1, Part A 3			0	0	0	0	0	58,140,795		
Forecast Allowable Project Spend	Outturn prices, £	UPDATED FOR RECONCILIATION Source: "2019 Revenue Statement - ITA Expenditure Forecast Review Q2 - Issued Rev1.pdf" for full-year 2019/20, 2020/21 and 2021/22 forecast. The 2019/20 figure is net of expenditure already realised (April to September) as reflected in Annual Actual Project Spend and Estimated Allowable Project Spend. Required by Project Licence Appendix 1, Part A 3, 4			0	0	0	0	0	338,668,378		
Excluded Project Spend	Outturn prices, £	Data removed as not required for reconciliation purposes. See "Inputs 2019".										
Alliance Agreement receipts - expenditure funded by these receipts is treated as Excluded Project Spend and therefore is excluded from the Allowable spend metrics set out above	Outturn prices, £	Data removed as not required for reconciliation purposes. See "Inputs 2019".										
BWACC	%	Source: Project Licence, Appendix 1, 1.18 Required by Project Licence Appendix 1, Part A 3, 4, 6, 7, 8				2.497%						

A.5. Opex

	Unit	Source/notes	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Opex forecast as at October 2019	Outturn prices, £	Note: In line with the Project Licence, zero as all expenditure treated as capex. Required by Project Licence Appendix 1, Part A 5				0	0	0	0	0		

A.6. Financing Cost Adjustment

	Unit	Source/notes	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Financing Cost Adjustment Index Yield - 12 months trailing average at 31 March	%	Source: "FCA yield calculator.xlsx" Calculated with reference to iBoxx BBB data and spot implied inflation rates for 10 year maturity from Bank of England. Required by Project Licence Appendix 1, Part A 6				1.30%	1.43%	0.35%				
Water Services Regulation Authority Adjusted RCV (Current Prices) at 31 March	Current prices at 31 March of Charging Year	Source: Regulatory Capital Values - Bazalgette Tunnel Limited (Tideway), Ofwat, 14 July 2017 Required by Project Licence Appendix 1, Part A 3	0	0	0	151,310,515	502,087,458					
Net Debt at 31 March	Current prices at 31 March of Charging Year	Source: Tideway financial statements as at 31 March 2017 Required by Project Licence Appendix 1, Part A 6	0	0	0	-130,376,913	-315,869,558					
Notional Debt to RCV ratio	%	Source: Project Licence Appendix 1, 1.42 Required by Project Licence Appendix 1, Part A 6				62.5%						

A 1.4. Tax

	Unit	Source/notes	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Tax as at October 2019	Outturn prices, £	In line with the Project Licence, zero as the IP is not required to pay corporation tax or any other income-based tax. See Project Licence Appendix 1, Part A 1.4				0	0	0	0	0		

A.7. Under/Over Recovered Revenue Adjustment - as at October 2017

	Unit	Source/notes
		See Project Licence, Appendix 1, Part A.7
Allowed Revenue (including building block reconciliation)	£	Data removed as not required for reconciliation purposes. See "Inputs 2019".
Amount recovered in respect of 2016/17 Allowed Revenue (to end of September 2017)	Outturn prices, £	Data removed as not required for reconciliation purposes. See "Inputs 2019".
Amounts received from TWUL in Charging Year (all years of Allowed Revenue)	Outturn prices, £	Data removed as not required for reconciliation purposes. See "Inputs 2019".

A.8. Reconciliation adjustment

	Unit	Source/notes
		See Project Licence, Appendix 1, Part A 8
Time since original calculation	Years	Data removed as not required for reconciliation purposes. See "Inputs 2019".
Reconcile this year?		Data removed as not required for reconciliation purposes. See "Inputs 2019".
Allowed Revenue as per most recently submitted Revenue Statement (excluding building block reconciliation)	£	Data removed as not required for reconciliation purposes. See "Inputs 2019".

A.11. Additional Return on Capital Building Block

	Source/notes
Additional Allowable Project Spend	Not applicable at present. Inputs to be added if this building block becomes relevant (i.e. if Tideway makes an IAR Overrun Application to increase Allowable Project Spend above the Threshold Outturn). See Project Licence, Appendix 1, Part A 11

A 1.6.4. Net Present Value Adjustment

	Source/notes	2017/18
End of first charging year	Last day of the First Charging Year	31/03/2016
Licence Award	Date of Licence award	24/08/2015

BBRA Calculation 2017

Building Block	Unit	Notes/description	2013/14	2014/15	First Charging Year	Second Charging Year	Third Charging Year	Fourth Charging Year
					2015/16	2016/17	2017/18	2018/19
Year starts					01/04/2015	01/04/2016	01/04/2017	01/04/2018
Year ends					31/03/2016	31/03/2017	31/03/2018	31/03/2019
Year t-2					2013/14	2014/15	2015/16	2016/17
Year t-1					2014/15	2015/16	2016/17	2017/18
Year t					2015/16	2016/17	2017/18	2018/19
Year t+1					2016/17	2017/18	2018/19	2019/20
Year t+2					2017/18	2018/19	2019/20	2020/21
1.1 2014/15 RPI Adjustment Factor		A factor calculated for each Charging Year to express costs associated with that year in a 2014/15 price base. See Project Licence, Appendix 1, 1.1.						
(a) for the purposes of calculating Forecast Allowable Project Spend for Charging Year Yt+1, estimated Allowable Project Spend for the said Charging Year shall be deflated from a price base in Charging Year Yt+1 to the Base RPI Index year ([2014/15]), using an adjustment factor derived from multiplying the factors set out in (i), (ii), (iii) a								
Forecast RPI Adjustment Factor for the calendar year in which Charging Year Yt+1 commences	%	Forecast RPI - see input sheet for description of source						2.7%
Forecast RPI Adjustment Factor for the calendar year in which Charging Year Yt+1 ends	%	Forecast RPI - see input sheet for description of source						2.8%
Forecast RPI Adjustment Factor for the calendar year in which Charging Year Yt commences	%	NOT USED FOR RECONCILIATION Forecast RPI - see input sheet for description of source						
Forecast RPI Adjustment Factor for the calendar year in which Charging Year Yt ends	%	NOT USED FOR RECONCILIATION Forecast RPI - see input sheet for description of source						
Percentage movement in the RPI (All Items) index as published by Office for National Statistics for the period April to September in the calendar year in which Charging Year Yt-1 commenced	%	NOT USED FOR RECONCILIATION Calculated with reference to the index values for March and September to capture April to September inflation (see "Statement of calculation 2018")						2.2%
Percentage movement in the RPI (All Items) index as published by Office for National Statistics for the period April to September in the calendar year in which Charging Year Yt commenced		NOT USED FOR RECONCILIATION Calculated with reference to the index values for March and September to capture April to September inflation (see "Statement of calculation 2018")						2.1%
Percentage movement in the RPI (All Items) index as published by Office for National Statistics for the period April to September in the calendar year in which Charging Year Yt+1 commenced		NEW ROW ADDED FOR RECONCILIATION Calculated with reference to the index values for March and September to capture April to September inflation (see "Statement of calculation 2018")						2.1%
Forecast RPI Adjustment Factor for the calendar year in which Charging Year Yt-1 commenced	%	NOT USED FOR RECONCILIATION Forecast RPI - see input sheet for description of source						
Forecast RPI Adjustment Factor for the calendar year in which Charging Year Yt-1 ends	%	NOT USED FOR RECONCILIATION Forecast RPI - see input sheet for description of source						
Base RPI		Year average RPI for 2014/15, used as base year RPI						256.7
Charging Year Yt-2, or where this is on or before Base RPI Index year, 2014/15		Year average RPI for Charging Year T-2 (or 2014/15 where this is later)						265.0
Charging Year Yt-1		NEW ROW ADDED FOR RECONCILIATION Year average RPI for Charging Year t-1						274.9
Charging Year Yt		NEW ROW ADDED FOR RECONCILIATION Year average RPI for Charging Year t						283.3
1.1 (i)		CALCULATION ALTERED FOR RECONCILIATION Factor used to adjust prices from Charging Year T+1 to Charging Year T						1.03
1.1 (ii)		CALCULATION ALTERED FOR RECONCILIATION Factor used to adjust prices from Charging Year T to Charging Year T-1						1.03
1.1 (iii)		CALCULATION ALTERED FOR RECONCILIATION Factor used to adjust prices from Charging Year T-1 to Charging Year T-2						1.04
1.1 (iv)		Factor used to adjust prices from Charging Year T-2 to Base RPI Index year						1.03
RPI Adjustment Factor Charging Year T+1		Combines factors (i), (ii), (iii) and (iv) above to calculate factor used to adjust prices from Charging Year T+1 to 2014/15 price base.						1.14
RPI Adjustment Factor Charging Year T		Combines factors (ii), (iii) and (iv) above to calculate factor used to adjust prices from Charging Year T to 2014/15 price base.						1.10
RPI Adjustment Factor Charging Year T-1		Combines factors (iii) and (iv) above to calculate factor used to adjust prices from Charging Year T-1 to 2014/15 price base.						1.07
RPI Adjustment Factor Charging Year T-2		Equal to factor (iv) above - used to adjust prices from Charging Year T-2 to 2014/15 price base.						1.03
Applicable Change in Revenue RPI		RPI in November of previous Charging Year relative to 2014/15 base year	0.96	0.98	1.01	1.01	1.03	1.07
RPIt		RPI in November of Charging Year T-1	245.6	252.1	259.8	259.8	265.5	275.8
RPIbase (Base RPI Index)		Average RPI for 2014/15	256.7	256.7	256.7	256.7	256.7	256.7
A.1. Allowed Revenue	£	Total Allowed Revenue calculated as the total of the building blocks below, in accordance with Project Licence, Appendix 1, 1.4. See Statement of calculation 2019 for further detail.						47,743,966
A.3. Return on Capital	£	The Return on Capital building block allows the IP to earn a return on capital in relation to the forecast average RCV in the Charging Year in question. See Project Licence, Appendix 1, Part A 3						32,904,067
Ofwat Stated RCV for Yt-2	£, 2014/15 prices	RCV at the end of Charging Year T-2 as published by Ofwat by 1 September following the end of the Charging Year						478,533,658
OPRCV Yt-1	£, 2014/15 prices	Opening RCV for Charging Year T-1.						478,533,658
2014/15 RPI Adjustment Factor Yt-1		Scalar to adjust forecast costs for Charging Year T-1 to 2014/15 price base						1.07
Annual Actual Project Spend Yt-1	£, 2014/15 prices	Allowable Project Spend (verified by the ITA) incurred in Charging Year T-1						483,782,768
Estimated Allowable Project Spend Yt-1	£, 2014/15 prices	Allowable Project Spend (not verified by the ITA) incurred in Charging Year T-1						0
Forecast Allowable Project Spend Yt-1	£, 2014/15 prices	Allowable Project Spend forecast to be incurred in Charging Year T-1						0
OPRCV Yt	£, 2014/15 prices	Opening RCV for Charging Year T - the sum of opening RCV for Charging year T-1 and all Allowable Project Spend in that year						962,316,426
2014/15 RPI Adjustment Factor Yt		Scalar to adjust forecast costs for Charging Year T to 2014/15 price base						1.10
Annual Actual Project Spend Yt	£, 2014/15 prices	Allowable Project Spend (verified by the ITA) incurred in Charging Year T						528,020,889
Estimated Allowable Project Spend Yt	£, 2014/15 prices	Allowable Project Spend (not verified by the ITA) incurred in Charging Year T						0
Forecast Allowable Project Spend Yt	£, 2014/15 prices	Allowable Project Spend forecast to be incurred in Charging Year T						0
CPRCV Yt	£, 2014/15 prices	Closing RCV for Charging Year T - the sum of opening RCV for Charging Year T and all Allowable Project Spend in that year						1,490,337,315
YARCV Yt	£, 2014/15 prices	Year average RCV for Charging Year T						1,226,326,870
A.4. Liquidity	£	The Liquidity building block allows the IP a liquidity allowance (return on capital) in relation to the incremental average RCV in the year following the Charging Year in question. See Project Licence, Appendix 1, Part A 4						14,378,284
OPRCV Yt+1	£, 2014/15 prices	Opening RCV for Charging Year T+1						1,490,337,315
2014/15 RPI Adjustment Factor Yt+1		Scalar to adjust forecast costs for Charging Year T+1 to 2014/15 price base						1.14
Annual Actual Project Spend for year Yt+1	£, 2014/15 prices	NEW ROW ADDED FOR RECONCILIATION Allowable Project Spend (verified by the ITA) incurred in Charging Year T+1						196,205,834
Estimated Allowable Project Spend for year Yt+1	£, 2014/15 prices	NEW ROW ADDED FOR RECONCILIATION Allowable Project Spend (not verified by the ITA) incurred in Charging Year T+1						50,919,472
Forecast Allowable Project Spend for year t+1	£, 2014/15 prices	Allowable Project Spend forecast to be incurred in Charging Year T+1						296,604,392
CPRCV Yt+1	£, 2014/15 prices	Closing RCV for Charging Year T+1						2,034,067,013
FYARCV Yt+1	£, 2014/15 prices	Average RCV for Charging Year T+1						1,762,202,164
A.5. Opex		In line with the Project Licence, the Opex building block is zero as all costs are accounted for as capital expenditure. See Project Licence, Appendix 1, Part A 5						0
A.6. Financing Cost Adjustment building block		The Financing Cost Adjustment building block is intended to protect against movements in the market cost of debt, by comparing a measure of financing costs at an annual reference point to a base reference point of March 2015. See Project Licence, Appendix 1, Part A 6					0	461,614
Financing Cost Adjustment Yt							0	461,614
Financing Cost Adjustment Index Yield	%	See Project Licence Appendix 1, Part A 6.3		1.30%	1.43%	0.35%		
Base Reference Point (BRP)	%	The historic 12 months' trailing average of the Financing Cost Adjustment Index Yield as at 31 March 2015			1.30%	1.30%	1.30%	1.30%
Annual Reference Point (ARP)	%	The historic 12 months' trailing average of the Financing Cost Adjustment Index Yield as at 31 March of Charging Year Yt-2			1.30%	1.30%	1.43%	0.35%
BRP-ABP	%	Difference between BRP and ARP			0.0%	0.0%	-0.1%	0.9%
Market Cost of Debt Adjustment Factor (absolute)	%	See Project Licence Appendix 1 Part A 6.7			0.0%	0.0%	0.0%	0.2%
Market Cost of Debt Adjustment Factor (corrected sign)	%	See Project Licence Appendix 1 Part A 6.7			0.0%	0.0%	0.0%	-0.2%
Net Debt in Charging Year Yt-2	£, current prices (March of Charging Year T-2)	Net Debt at the end of Charging Year T-2 as defined in Project Licence Appendix 1, 1.41			0	0	-130,376,913	-315,869,558
Water Services Regulation Authority Adjusted RCV (Current Prices) in Charging Year Yt-2	£, current prices (March of Charging Year T-2)	RCV at the end of Charging Year T-2 in then current prices			0	0	151,310,515	502,087,458
Notional Debt to RCV Ratio	%	As defined in Project Licence Appendix 1, 1.42			62.5%	62.5%	62.5%	62.5%
Notional Net Debt in Charging Year Yt-2	£, current prices (March of Charging Year T-2)	RCV multiplied by Notional Debt to RCV ratio. See Project Licence Appendix 1 Part A 6.9			0	0	94,569,072	313,804,661
Net Debt in Charging Year Yt-3	£, current prices (March of Charging Year T-3)	Net Debt at the end of Charging Year T-3 as defined in Project Licence Appendix 1, 1.41			0	0	0	-130,376,913
Water Services Regulation Authority Adjusted RCV (Current Prices) in Charging Year Yt-3	£, current prices (March of Charging Year T-3)	RCV at the end of Charging Year T-3 in then current prices			0	0	0	151,310,515
Notional Debt to RCV Ratio	%	As defined in Project Licence Appendix 1, 1.42			62.5%	62.5%	62.5%	62.5%
Notional Net Debt in Charging Year Yt-3	£, current prices (March of Charging Year T-3)	RCV multiplied by Notional Debt to RCV ratio. See Project Licence Appendix 1 Part A 6.9			0	0	0	94,569,072
Applicable Change in Revenue RPI for Charging Year Yt					1.01	1.01	1.03	1.07
Applicable Change in Revenue RPI for Charging Year Yt-2					0.96	0.98	1.01	1.01
A.1.4. Tax	£	In line with the Project Licence, zero as the IP is not required to pay corporation tax or any other income-based tax. See Project Licence Appendix 1, Part A 1.4						0
A.7. Under/Over Recovered Revenue Adjustment	£	REMOVED FROM THIS RECONCILIATION SHEET AS RECONCILED SEPARATELY, AS UNDER/OVER RECOVERED REVENUE IN RELATION TO ALL APPLICABLE CHARGING YEARS IS RECONCILED IN CALCULATION 2019. The revenue adjustment building block is to reconcile for under/over recovered Allowed Revenue in previous Charging Years. See Project Licence, Appendix 1, Part A.7						
Allowed Revenue		Allowed Revenue as submitted in 2015 updated revised Revenue Statement						
Amount recovered in respect of 2016/17 Allowed Revenue (to end of September 2017)		Amount collected by Thames Water and received by Tideway in respect of 2016/17 Allowed Revenue, prior to the end of September 2017.						
Applicable Change in Revenue RPI (year in which original calculation was made)								
Applicable Change in Revenue RPI (current year)								
Reconciliation amounts (unadjusted)		Difference between Allowed Revenue for a Charging Year and the amount collected by Thames Water and received by Tideway in respect of that Allowed Revenue.						
Reconciliation amounts (NPV-adjusted)		Reconciliation amount as calculated above, NPV-adjusted for the delay between the original Charging Year and the year of reconciliation using the BWACC and Applicable Change in Revenue RPI.						
A.8. Reconciliation adjustment	£	REMOVED FROM THIS RECONCILIATION SHEET AS RECONCILED SEPARATELY IN BBRA CALCULATION 2016 Reconciliation for updated expenditure and inflation data to reflect realised actuals and updated forecasts. See Project Licence, Appendix 1, Part A 8						0
Reconcile this year?	n/a	Revenue for a given Charging Year is subject to building block reconciliation adjustment where estimated or forecast expenditure or inflation inputs were used the last time that year's revenue was calculated. Defined as follows: 1 = yes, 0= no						
Time since original calculation	years	Represents the number of years since revenue was first calculated to feed into the NPV adjustment of the reconciliation adjustment.						
Allowed Revenue (as at October 2017)	£	Allowed Revenue recalculated using updated expenditure and inflation data. Excludes the under/over recovered revenue adjustment and the reconciliation adjustment building blocks, as these building blocks are not subject to reconciliation. See BBRA Calculation 2015 and BBRA Calculation 2016						
Allowed Revenue (as at October 2016)	£	Allowed Revenue as submitted in 2016 revised Revenue Statement. Excludes the under/over recovered revenue adjustment and the reconciliation adjustment building blocks, as these building blocks are not subject to reconciliation.						
Applicable Change in Revenue RPI (year in which original calculation was made)								
Applicable Change in Revenue RPI (current year)								
Reconciliation amounts (unadjusted)	£	Adjustment calculated as difference between updated calculation and previous year's calculation, prior to NPV adjustment.						
Reconciliation amounts (NPV-adjusted)	£	Adjustment calculated as difference between updated calculation and previous year's calculation, post NPV-adjustment using BWACC and Applicable Change in Revenue RPI.						
A.11. Additional Return on Capital Building Block	£	Not applicable. To be added to calculation if building block becomes relevant (i.e. if Tideway makes an IAR Overrun Application to increase Allowable Project Spend above the Threshold Outturn). See Project Licence, Appendix 1, Part A 11						
A.11. Additional Liquidity Building Block	£	Not applicable. To be added to calculation if building block becomes relevant (i.e. if Tideway makes an IAR Overrun Application to increase Allowable Project Spend above the Threshold Outturn). See Project Licence, Appendix 1, Part A 11						

BBRA Inputs 2016

	Unit	Source/notes	2012/13	2013/14	2014/15	First Charging Year 2015/16	Second charging year 2016/17	Third Charging Year 2017/18	Fourth Charging Year 2018/19	Fifth Charging Year 2019/20	Sixth Charging Year 2020/21
Year starts						01/04/2015	01/04/2016	01/04/2017	01/04/2018	01/04/2019	01/04/2020
Year ends						31/03/2016	31/03/2017	31/03/2018	31/03/2019	31/03/2020	31/03/2021
Year t-2						2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Year t-1						2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
Year t						2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Year t+1						2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Year t+2						2017/18	2018/19	2019/20	2020/21	2021/22	2022/23

1.1 2014/15 RPI Adjustment Factor

	Unit	Source/notes	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Forecast RPI Adjustment Factor for the calendar year in which Charging Year commences	%	*UPDATED FOR RECONCILIATION (2018 Revenue Statement) Source: Average independent new forecasts for RPI, Table M3, "Forecasts for the UK economy: a comparison of independent forecasts", HM Treasury, August 2018* / *Required by Project Licence Appendix 1, 1.1 (i), (ii), (iii)*								2.7%	2.8%
Forecast RPI Adjustment Factor for the calendar year in which Charging Year ends	%	*UPDATED FOR RECONCILIATION (2018 Revenue Statement) Source: Average independent new forecasts for RPI, Table M3, "Forecasts for the UK economy: a comparison of independent forecasts", HM Treasury, August 2018* / *Required by Project Licence Appendix 1, 1.1 (i), (ii)*								2.8%	3.0%
RPI, September of Charging Year		*UPDATED FOR RECONCILIATION (2018 Revenue Statement) Source: RPI (All Items) index, Consumer Price Inflation Reference Tables, Table 36, 17 October 2018, Office for National Statistics.* / *Required by Project Licence Appendix 1, 1.1 (iii)*			257.6	259.6	264.9	275.1	284.1		
RPI, March of Charging Year		*UPDATED FOR RECONCILIATION (2018 Revenue Statement) Source: RPI (All Items) index, Consumer Price Inflation Reference Tables, Table 36, 17 October 2018, Office for National Statistics.* / *Required by Project Licence 1, 1.1 (iii)*		254.8	257.1	261.1	269.3	278.3			

Applicable Change in Revenue RPI

	Unit	Source/notes	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
RPIt (RPI for November in Charging Year Yt-1)		*Source: RPI (All Items) index, Consumer Price Inflation Reference Tables, Table 36, 13 December 2016, Office for National Statistics.* / *Required by Project Licence Appendix 1, Part A 3, 4 and 6* / *Note: for both First and Second Charging years, stated RPI is for November 2015, as Allowed Revenue for both these years is being calculated together*			245.6	252.1	259.8	259.8	265.5		
Year average RPI		*UPDATED FOR RECONCILIATION Source: Calculated from RPI (All Items) index, Consumer Price Inflation Reference Tables, Table 36, 15 October 2019 Office for National Statistics* / *Required by Project Licence 1, Part A 3, 4 and 6 and Appendix 1, 1.1 (iv)*			256.7	259.4	265.0	274.9	283.3		

A.3. Return on Capital and A.4 Liquidity

	Unit	Source/notes	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Water Services Regulation Authority Stated RCV (2014/15 Prices) at 31 March	2014/15 prices, £	*Source: Ofwat publication (prs_web2016RcvBazalgette.xlsx). Zero prior to licence award* / *Required by Project Licence Appendix 1, Part A 3*		0	0	148,741,346					

Allowable Project Spend (actual and forecast) - as at October 2019

	Unit	Source/notes	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Annual Actual Project Spend	Outturn prices, £	*Source: "ITA Verification No. 37.pdf"* / *Required by Project Licence 1, Part A 3*			0	150,344,662	340,489,147	518,165,900	582,828,772		
Estimated Allowable Project Spend	Outturn prices, £	*Source: "Regulation Reporting Sep 19"* / *Required by Project Licence Appendix 1, Part A 3*			0	0	0	0	0		
Forecast Allowable Project Spend	Outturn prices, £	*Source: "2019 Revenue Statement - ITA Expenditure Forecast Review Q2 - Issued Rev1.pdf" for full-year 2019/20, 2020/21 and 2021/22 forecast. The 2019/20 figure is net of expenditure already realised (April to September) as reflected in Annual Actual Project Spend and Estimated Allowable Project Spend.* / *Required by Project Licence 1. Part A. 3, 4*			0	0	0	0	0		
Excluded Project Spend	Outturn prices, £	*Data removed as not required for reconciliation purposes. See "Inputs 2019".*									
Alliance Agreement receipts - expenditure funded by these receipts is treated as Excluded Project Spend and therefore is excluded from the Allowable spend metrics set out above	Outturn prices, £	*Data removed as not required for reconciliation purposes. See "Inputs 2019".*									
BWACC	%	*Source: Project Licence, Appendix 1, 1.18* / *Required by Project Licence Appendix 1. Part A 3, 4, 6, 7, 8*				2.497%					

A.5. Opex

	Unit	Source/notes	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Opex forecast as at October 2019	Outturn prices, £	*Note: In line with the Project Licence, zero as all expenditure treated as capex.* / *Required by Project Licence Appendix 1, Part A 5*				0	0	0			

A.6. Financing Cost Adjustment

	Unit	Source/notes	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Financing Cost Adjustment Index Yield - 12 months trailing average at 31 March	%	*Source: "20161018_TTT index data.xlsx"* / *Calculated with reference to iBoxx BBB data from Bloomberg and spot implied inflation rates for 10 year maturity from Bank of England* / *Required by Project Licence Appendix 1, Part A 6*			1.30%	1.43%					
Water Services Regulation Authority Adjusted RCV (Current Prices) at 31 March	Current prices at 31 March of Charging Year	*Source: Ofwat publication (prs_web2016RcvBazalgette.xlsx). Zero prior to licence award* / *Required by Project Licence Appendix 1, Part A 3*	0	0	0	151,310,515					
Net Debt at 31 March	Current prices at 31 March of Charging Year	*Source: Tideway regulatory accounts, zero prior to Licence award* / *Required by Project Licence Appendix 1, Part A 6*	0	0	0	-130,376,913					
Notional Debt to RCV ratio	%	*Source: Project Licence Appendix 1, 1.42* / *Required by Project Licence Appendix 1, Part A 6*				62.5%					

A 1.4. Tax

	Unit	Source/notes	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Tax as at October 2019	Outturn prices, £	*In line with the Project Licence, zero as the IP is not required to pay corporation tax or any other income-based tax.* / *See Project Licence Appendix 1, Part A 1.4*				0	0	0			

A.7. Under/Over Recovered Revenue Adjustment - as at October 2016

	Unit	Source/notes
		See Project Licence, Appendix 1, Part A.7
Allowed Revenue	£	*Data removed as not required for reconciliation purposes.*
Amount recovered in respect of IP Charge as at end of [Charging Year T-3]	£	*Not applicable for 2015 and 2016 Revenue Statements as adjustment applies in respect of Charging Year T-2, and 2015 was the first year the Allowed Revenue calculation was made. In future years, source will be IP regulatory accounts.*
Amount recovered in respect of IP Charge April - September accounting periods [Charging Year T-2]	£	*Not applicable for 2015 and 2016 Revenue Statements as adjustment applies in respect of Charging Year T-2, and 2015 was the first year the Allowed Revenue calculation was made. In future years, source will be IP internal accounting records.*
Amount recovered in respect of IP Charge as at end of [Charging Year T-2]	£	*Not applicable for 2015 and 2016 Revenue Statements as adjustment applies in respect of Charging Year T-2, and 2015 was the first year the Allowed Revenue calculation was made. In future years, source will be IP regulatory accounts.*
Amount recovered in respect of IP Charge April - September accounting periods [Charging Year T-1]	£	*Not applicable for 2015 and 2016 Revenue Statements as adjustment applies in respect of Charging Year T-2, and 2015 was the first year the Allowed Revenue calculation was made. In future years, source will be IP internal accounting records.*

A.8. Reconciliation adjustment

	Unit	Source/notes
		See Project Licence, Appendix 1, Part A 8
Time since most recent calculation	Years	*Data removed as not required for reconciliation purposes.*
Reconcile this year?		*Data removed as not required for reconciliation purposes.*
Allowed Revenue as per most recently submitted Revenue Statement	£	*Data removed as not required for reconciliation purposes.*

A.11. Additional Return on Capital Building Block

	Unit	Source/notes
		Not applicable at present. Inputs to be added if this building block becomes relevant (i.e. if Tideway makes an IAR Overrun Application to increase Allowable Project Spend above the Threshold Outturn). See Project Licence, Appendix 1, Part A 11
Additional Allowable Project Spend		

A 1.6.4. Net Present Value Adjustment

	Unit	Source/notes
End of first charging year		*Data removed as not required for reconciliation purposes.*
Licence Award		*Data removed as not required for reconciliation purposes.*

BBRA Calculation 2016

Building Block	Unit	Notes/description		2013/14	2014/15	First Charging Year	Second Charging Year	Third Charging Year
						2015/16	2016/17	2017/18
Year starts						01/04/2015	01/04/2016	01/04/2017
Year ends						31/03/2016	31/03/2017	31/03/2018
Year t-2						2013/14	2014/15	2015/16
Year t-1						2014/15	2015/16	2016/17
Year t						2015/16	2016/17	2017/18
Year t+1						2016/17	2017/18	2018/19
Year t+2						2017/18	2018/19	2019/20

1.1 2014/15 RPI Adjustment Factor

A factor calculated for each Charging Year to express costs associated with that year in a 2014/15 price base. See Project Licence, Appendix 1, 1.1.

(a) for the purposes of calculating Forecast Allowable Project Spend for Charging Year Yt+1, estimated Allowable Project Spend for the said Charging Year shall be deflated from a price base in Charging Year Yt+1 to the Base RPI Index year (2014/15), using an adjustment factor derived from multiplying the factors set out in (i), (ii), (iii) and (iv) below:

Row	Unit	Note
Forecast RPI Adjustment Factor for the calendar year in which Charging Year Yt+1 commences	%	NOT USED FOR RECONCILIATION Forecast RPI - see input sheet for description of source
Forecast RPI Adjustment Factor for the calendar year in which Charging Year Yt+1 ends	%	NOT USED FOR RECONCILIATION Forecast RPI - see input sheet for description of source
Forecast RPI Adjustment Factor for the calendar year in which Charging Year Yt commences	%	NOT USED FOR RECONCILIATION Forecast RPI - see input sheet for description of source
Forecast RPI Adjustment Factor for the calendar year in which Charging Year Yt ends	%	NOT USED FOR RECONCILIATION Forecast RPI - see input sheet for description of source

Row	Unit	Note
Percentage movement in the RPI (All items) index as published by Office for National Statistics for the period April to September in the calendar year in which Charging Year Yt-1 commenced	%	NOT USED FOR RECONCILIATION Calculated with reference to the index values for March and September to capture April to September inflation (see "Statement of calculation 2016")
Percentage movement in the RPI (All items) index as published by Office for National Statistics for the period April to September in the calendar year in which Charging Year Yt commenced	%	NOT USED FOR RECONCILIATION Calculated with reference to the index values for March and September to capture April to September inflation (see "Statement of calculation 2016")
Percentage movement in the RPI (All items) index as published by Office for National Statistics for the period April to September in the calendar year in which Charging Year Yt+1 commenced	%	NEW ROW ADDED FOR RECONCILIATION Calculated with reference to the index values for March and September to capture April to September inflation (see "Statement of calculation 2016")
Forecast RPI Adjustment Factor for the calendar year in which Charging Year Yt-1 commenced	%	NOT USED FOR RECONCILIATION Forecast RPI - see input sheet for description of source
Forecast RPI Adjustment Factor for the calendar year in which Charging Year Yt-1 ends	%	NOT USED FOR RECONCILIATION Forecast RPI - see input sheet for description of source

Row	Note	Third Charging Year
Base RPI	Year average RPI for 2014/15, used as base year RPI	256.7
Charging Year Yt-2, or where this is on or before Base RPI Index year, 2014/15	Year average RPI for Charging year T-2 (or 2014/15 where this is later)	259.4
Charging Year Yt-1	NEW ROW ADDED FOR RECONCILIATION Year average RPI for Charging Year T-1	260.0
Charging Year Yt	NEW ROW ADDED FOR RECONCILIATION Year average RPI for Charging year T	279.8
Charging Year Yt+1	NEW ROW ADDED FOR RECONCILIATION Year average RPI for Charging Year T+1	283.3
1.1 (i)	CALCULATION ALTERED FOR RECONCILIATION Factor used to adjust prices from Charging Year T+1 to Charging Year T	1.03
1.1 (ii)	CALCULATION ALTERED FOR RECONCILIATION Factor used to adjust prices from Charging Year T to Charging Year T-1	1.04
1.1 (iii)	CALCULATION ALTERED FOR RECONCILIATION Factor used to adjust prices from Charging Year T-1 to Charging Year T-2	1.00
1.1 (iv)	Factor used to adjust prices from Charging Year T-2 to Charging Year T-3	1.01
RPI Adjustment Factor Charging Year T+1	Combines factors (i), (ii), (iii) and (iv) above to calculate factor used to adjust prices from Charging Year T+1 to 2014/15 price base.	1.10
RPI Adjustment Factor Charging Year T	Combines factors (ii), (iii) and (iv) above to calculate factor used to adjust prices from Charging Year T to 2014/15 price base	1.07
RPI Adjustment Factor Charging Year T-1	Combines factors (iii) and (iv) above to calculate factor used to adjust prices from Charging Year T-1 to 2014/15 price base	1.03
RPI Adjustment Factor Charging Year T-2	NOT USED FOR RECONCILIATION Equal to factor (iv) above - used to adjust prices from Charging Year T-2 to 2014/15 price base.	1.01

Applicable Change in Revenue RPI			0.95	0.95	1.01	1.01	1.03
RPI	RPI in November of previous Charging Year relative to 2014/15 base year						
RPI	RPI in November of Charging Year T-1	245.6	252.1	259.8	259.8	265.5
RPIbase (Base RPI Index)	Average RPI for 2014/15	256.7	256.7	256.7	256.7	256.7

A.1. Allowed Revenue	£	Total Allowed Revenue calculated as the total of the building blocks below, in accordance with Project Licence, Appendix 1, 1.4. See "Statement of calculation 2016 for further detail"						31,675,235

A.3. Return on Capital	£	The Return on Capital building block allows the IP to earn a return on the forecast average RCV in the Charging Year in question. See Project Licence, Appendix 1, Part A.3						16,906,116

Row	Unit	Note	Third Charging Year
Ofwat Stated RCV for Yt-2	£, 2014/15 prices	RCV at the end of Charging Year T-2 as published by Ofwat by 1 September following the end of the Charging Year.	148,741,346
OPRCV Yt-1	£, 2014/15 prices	Opening RCV for Charging Year T-1	148,741,346
2014/15 RPI Adjustment Factor Yt-1	£, 2014/15 prices	Scalar to adjust forecast costs for Charging Year T-1 to 2014/15 price base	1.03
Annual Actual Project Spend Yt-1	£, 2014/15 prices	Allowable Project Spend verified by the ITA) incurred in Charging Year T-1	329,782,212
Estimated Allowable Project Spend Yt-1	£, 2014/15 prices	Allowable Project Spend forecast to be incurred in Charging Year T-1	0
Forecast Allowable Project Spend Yt-1	£, 2014/15 prices	Allowable Project Spend forecast to be incurred in Charging Year T-1	0
OPRCV Yt	£, 2014/15 prices	Opening RCV for Charging Year T - the sum of opening RCV for Charging year T-1 and all Allowable Project Spend in that year	478,523,628
2014/15 RPI Adjustment Factor Yt	£, 2014/15 prices	Scalar to adjust forecast costs for Charging Year T to 2014/15 price base	1.07
Annual Actual Project Spend Yt	£, 2014/15 prices	Allowable Project Spend (not verified by the ITA) incurred in Charging Year T	483,792,768
Estimated Allowable Project Spend Yt	£, 2014/15 prices	Allowable Project Spend (not verified by the ITA) incurred in Charging Year T	0
Forecast Allowable Project Spend Yt	£, 2014/15 prices	Allowable Project Spend to be incurred in Charging Year T	0
CPRCV Yt	£, 2014/15 prices	Closing RCV for Charging Year T - the sum of opening RCV for Charging Year T and all Allowable Project Spend in that year	962,316,406
YARCV Yt	£, 2014/15 prices	Year average RCV for Charging Year T	720,420,002

A.4. Liquidity	£	The Liquidity building block allows the IP a liquidity allowance (return on capital) in relation to the incremental average RCV in the year following the Charging Year in question. See Project Licence, Appendix 1, Part A.4.						12,867,119

Row	Unit	Note	Third Charging Year
OPRCV Yt+1	£, 2014/15 prices	Opening RCV for Charging Year T+1	962,316,406
2014/15 RPI Adjustment Factor Yt+1	£, 2014/15 prices	Scalar to adjust forecast costs for Charging Year T+1 to 2014/15 price base	1.10
Annual Actual Project Spend for year Yt+1	£, 2014/15 prices	NEW ROW ADDED FOR RECONCILIATION Allowable Project Spend (verified by the ITA) incurred in Charging Year T+1	328,006,909
Estimated Allowable Project Spend for year Yt+1	£, 2014/15 prices	Allowable Project Spend forecast to be incurred in Charging Year T+1	0
Forecast Allowable Project Spend for year Yt+1	£, 2014/15 prices	Allowable Project Spend forecast to be incurred in Charging Year T+1	0
CPRCV Yt+1	£, 2014/15 prices	Closing RCV for Charging Year T+1	1,490,337,315
FYARCV Yt+1	£, 2014/15 prices	Average RCV for Charging Year T+1	1,226,326,870

A.5. Opex	£	In line with the Project Licence, the Opex building block is zero as all costs are accounted for as capital expenditure. See Project Licence, Appendix 1, Part A.5.						0

A.6. Financing Cost Adjustment building block	£	The Financing Cost Adjustment building block is intended to protect against movements in the market cost of debt, by comparing a measure of financing costs at an annual reference point to a base reference point (March 2015). See Project Licence, Appendix 1, Part A.6.						0

Financing Cost Adjustment Yt						0	0	0

Financing Cost Adjustment Index Yield	%	See Project Licence Appendix 1, Part A.6.3		1.20%	1.43%			

Row	Unit	Note	First Charging Year	Second Charging Year	Third Charging Year
Base Reference Point (BRP)	%	The historic 12 months' trailing average of the Financing Cost Adjustment Index Yield as at 31 March 2015	1.20%	1.20%	1.20%
Annual Reference Point (ARP)	%	The historic 12 months' trailing average of the Financing Cost Adjustment Index Yield as at 31 March of Charging Year Yt-2	1.20%	1.20%	1.43%
BRP-ARP	%	Difference between BRP and ARP	0.0%	0.0%	-0.1%
Market Cost of Debt Adjustment Factor (absolute)	%	See Project Licence Appendix 1 Part A.6.7	0.0%	0.0%	0.0%
Market Cost of Debt Adjustment Factor (corrected sign)	%	NEW ROW FOR 2016 See Project Licence Appendix 1 Part A.6.7	0.0%	0.0%	0.0%

Row	Unit	Note	First Charging Year	Second Charging Year	Third Charging Year
Net Debt in Charging Year Yt-2	£, current prices (March of Charging Year T-2)	Net Debt at the end of Charging Year T-2 as defined in Project Licence Appendix 1, 1.41	0	0	-430,376,912
Water Services Regulation Authority Adjusted RCV (Current Prices) in Charging Year Yt-2	£, current prices (March of Charging Year T-2)	RCV at the end of Charging Year T-2 in then current prices	0	0	101,310,015
Notional Debt to RCV Ratio	%	As defined in Project Licence Appendix 1, 1.40	62.5%	62.5%	62.5%
Notional Net Debt in Charging Year Yt-2	£, current prices (March of Charging Year T-2)	RCV multiplied by Notional Debt to RCV ratio. See Project Licence Appendix 1 Part A.6.9	0	0	94,569,072

Net Debt in Charging Year Yt-3	£, current prices (March of Charging Year T-3)	Net Debt at the end of Charging Year T-3 as defined in Project Licence Appendix 1, 1.41	0	0	0
Water Services Regulation Authority Adjusted RCV (Current Prices) in Charging Year Yt-3	£, current prices (March of Charging Year T-3)	RCV at the end of Charging Year T-3 in then current prices	0	0	0
Notional Debt to RCV Ratio	%	As defined in Project Licence Appendix 1, 1.40	62.5%	62.5%	62.5%
Notional Net Debt in Charging Year Yt-3	£, current prices (March of Charging Year T-3)	RCV multiplied by Notional Debt to RCV ratio. See Project Licence Appendix 1 Part A.6.9	0	0	0

Applicable Change in Revenue RPI for Charging Year Yt						1.01	1.01	1.03
Applicable Change in Revenue RPI for Charging Year Yt-2						0.96	0.98	1.01

A.1.4. Tax	£	In line with the Project Licence, zero as the IP is not required to pay corporation tax or any other income-based tax. See Project Licence Appendix 1, Part A.1.4						0

A.7. Under/Over Recovered Revenue Adjustment	£	The revenue adjustment building block is to reconcile for under/over recovered Revenue in previous Charging Year. Not applicable for 2015 and 2016 Revenue Statements as adjustment applies in respect of Charging Year T-2, and 2015 was the first year the Allowed Revenue calculation was made. See Project Licence, Appendix 1, Part A.7						0

A.8. Reconciliation adjustment	£	REMOVED FROM THIS RECONCILIATION SHEET AS RECONCILED SEPARATELY IN PREVIOUS REVENUE STATEMENTS. Reconciliation for updated expenditure and inflation data to reflect realised actuals and updated forecasts. See Project Licence, Appendix 1, Part A.8						0

Row	Unit	Note
Reconcile this year?	n/a	Revenue for a given Charging Year is subject to building block reconciliation adjustment where estimated or forecast expenditure or inflation inputs were used the last time that year's revenue was calculated. Defined as follows: 1 = yes; 0 = no.
Time since most recent calculation	years	Represents the number of years since revenue was most recently calculated to feed into the NPV adjustment of the reconciliation adjustment.
Allowed Revenue (as at October 2016)	£	Allowed Revenue recalculated using updated expenditure and inflation data. Excludes the under/over recovered revenue adjustment and the reconciliation adjustment building blocks, as these building blocks are not subject to reconciliation.
Allowed Revenue (as at October 2015)	£	Allowed Revenue as submitted in 2015 updated revised Revenue Statement. Excludes the under/over recovered revenue adjustment and the reconciliation adjustment building blocks, as these building blocks are not subject to reconciliation.
Applicable Change in Revenue RPI (year in which original calculation was made)		
Applicable Change in Revenue RPI (current year)		
Reconciliation amounts (unadjusted)	£	Adjustment calculated as difference between updated calculation and previous year's calculation, prior to NPV adjustment
Reconciliation amounts (NPV-adjusted)	£	Adjustment calculated as difference between updated calculation and previous year's calculation, post NPV-adjustment using RPIACC and Applicable Change in Revenue RPI

A.11. Additional Return on Capital Building Block	£	Not applicable. To be added to calculation if building block becomes relevant (i.e. if Tideway makes an IAR Overrun Application to increase Allowable Project Spend above the Threshold Output). See Project Licence, Appendix 1, Part A.11						

A.11. Additional Liquidity Building Block	£	Not applicable. To be added to calculation if building block becomes relevant (i.e. if Tideway makes an IAR Overrun Application to increase Allowable Project Spend above the Threshold Output). See Project Licence, Appendix 1, Part A.11						