April 2023



About this document

Version control

Version	Date published	Description
v0.1	3 February 2023	For consultation
v1.0	31 March 2023	Final version

Detailed technical appendices

There are 4 separate documents which support RAG 4.11:

Appendix	Title
1	Income categorisation
2	Water resources – further guidance
3	Sludge boundaries – further guidance
4	Cumulative totals for enhancement capital expenditure

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1. Definitions of terms; tables 1A-1F (regulatory financial reporting)

Financial performance for the 12 months ended 31 March 20xx

1.1 In completing all relevant tables in Section 1 – Regulatory financial reporting, companies should include all debt relevant to the regulated company, even where this has been taken out by an associate or financing subsidiary.

Line	Title	Definition
1A.1	Revenue	Appointed – Total business revenue that is within the scope of the price control, together with revenue that is outside of the price control but still forms part of regulated activities. Non-appointed – Total business revenue from non- appointed activities as defined by the licence. See appendix 1 for further examples.
1A.2	Operating costs	Historical cost operating costs.
1A.3	Other operating income	Historical cost operating income includes profits or loss on disposal of fixed assets; income arising from exceptional items should also be included. Normally a positive number, but a loss should be negative.
1A.4	Operating profit	Historical cost operating profit. Equal to the sum of lines 1A.1 to 1A.3.
1A.5	Other income	Includes rental income and income from investments (e.g. share income); excludes net interest and profit on disposals on fixed assets. Grants and contributions, adopted assets Companies may recognise grants and contributions in the income statement under UKGAAP. This may be as revenue, by netting off opex, another income line or by amortisation over the life of the asset. We require that all such income be shown as 'other income' in this line. Amortised credits should be recorded in this line where recognition of the asset is spread over a number of years. This permits a consistent treatment as required in RAG1 paragraphs 4.11-4.13.
1A.6	Interest income	Interest income includes interest received on cash deposits, loans to group companies, etc.
1A.7	Interest expense	Interest expense includes interest paid on loans, leases, debenture, floating rate debt, overdrafts, preference shares and all other borrowings.
1A.8	Other interest expense	Total net interest expenses which are not directly related to deposits and borrowings as defined in 1A.6 and 1A.7. e.g. Net interest cost of defined benefit pension schemes.

Pro forma 1A: Income statement

Line	Title	Definition
1A.9	Profit before taxation and fair value movements	Equal to the sum of lines 1A.4 to 1A.8.
1A.10	Fair value gains/(losses) on financial instruments	Any fair value gains/(losses) arising on financial instruments which must be accounted for at fair value on the balance sheet with changes recognised in the income statement.
1A.11	Profit before tax	Historical cost profit on ordinary activities before taxation. Equal to the sum of lines 1A.9 to 1A.10.
1A.12	UK Corporation tax	The current tax charge on profits from ordinary activities. This will include mainstream corporation tax, income and other taxes. It should exclude any deferred tax charge which is to be reported separately. A positive number for tax credit, negative number for tax charge.
1A.13	Deferred tax	The movement in the deferred tax provision. A positive number for tax credit, negative number for tax charge.
1A.14	Profit for the year	Historical cost profit for the year. To be shown after taxation, but before deduction of dividends. Equal to the sum of lines 1A.11 to 1A.13.
1A.15	Dividends	Dividends declared by the company in the year.
1A.16	Current year	The current tax charge on profits from ordinary activities, excluding any adjustment in respect of prior years. This will include mainstream corporation tax, income and other taxes and any payments for group relief received. It should exclude any deferred tax charge which is to be reported separately. Negative signage is a tax credit, while positive is a tax charge.
1A.17	Adjustment in respect of prior years	The impact on the current tax charge of adjustments in respect of prior years. Negative signage is a tax credit, while positive is a tax charge.
1A.18	UK corporation tax	Sum of 1A.16 and 1A.17. Equal value to1A.12 but opposite signage. Negative signage is a tax credit, while positive is a tax charge.
1A.19	Imported sludge	Revenue from disposing of sludge from other wastewater undertakers.
1A.20	Tankered waste	Revenue for treating tankered waste brought to WWTWs.
1A.21	Other non-appointed revenue	Other non-appointed revenue not included in 1A.19 or 1A.20.
14 22	Revenue	Total non-appointed revenue. Sum of 1A.19 to 1A.21.

Pro forma 1B: Statement of comprehensive income

Line	Title	Definition
1B.1	Profit for the year	Historical cost profit for the year. Equal to line 1A.14.
1B.2	Actuarial gains/(losses) on post- employment plans	Actuarial gains/(losses) on post-employment plans.
1B.3	Other comprehensive income	Other gains and losses.

1	lB.4	Total comprehensive	Total comprehensive income for the year. Equal to the sum of lines
		income for the year	1B.1 to 1B.3.

Pro forma 1C: Statement of financial position

Line	Title	Definition
1C.1	Fixed assets	Historical cost net book value of tangible fixed assets at the end of the financial year.
1C.2	Intangible assets	Total value of any intangible assets (not physical in nature) at the end of the financial year.
1C.3	Investments – loans to group companies	Loans made to other group companies repayable in more than one year.
1C.4	Investment – other	All investments, excluding those in line 1C.3, eg, shares in other group companies.
1C.5	Financial instruments	Difference between book value and fair value of any non- current assets relating to financial instruments, including options, futures, forwards and swaps, which are presented at fair value in the statutory accounts.
1C.6	Retirement benefit assets	The total amount due to employees in the pension scheme for all of the past service completed up to the balance sheet date, less scheme assets. Where this calculation results in a net asset it should be shown in this line.
1C.7	Total non-current assets	Historical cost total fixed assets. Equal to the sum of lines 1C.1 to 1C.6.
1C.8	Inventories	Stocks held at the year end. Stocks consist of consumable stores and work in progress, including chemicals, stationery, petrol, backfill materials, etc.
1C.9	Trade & other receivables	Debtors consist of all amounts owing to the company at the financial year end including trade debtors, prepayments and accrued income. This includes amounts falling due after more than one year. Any assets held for sale should also be included here.
1C.10	Financial instruments	Difference between book value and fair value of any current assets relating to financial instruments, including options, futures, forwards and swaps, which are presented at fair value in the statutory accounts.
1C.11	Cash & Cash equivalents	Cash consists of cash in hand and at bank and short-term deposits. Overdraft balances should not be netted off as they should be included separately in 'Trade & other payables'. Equal to the sum of 1E.4 and 1E.5.
1C.12	Total current assets	Equal to the sum of lines 1C.8 to 1C.11.
1C.13	Trade & other payables	Trade creditors, accrued interest and any other accruals or creditors due within one year that are not borrowings, tax creditors, capex creditors or liabilities arising from derivative financial instruments.
1C.14	Capex creditor	Capital expenditure creditors due within one year.
1C.15	Borrowings	Balances due within one year which comprise:
		obligations under leases; loans due to other group companies;

Line	Title	Definition
		redeemable debentures;
		bonds;
		commercial paper;
		bills of exchange;
		bank loans; and
		any other borrowings.
		Accrued interest on borrowings should not be included.
1C.16	Financial instruments	Difference between book value and fair value of any current liabilities relating to financial instruments, including options, futures, forwards and swaps, which are presented at fair value in the statutory accounts.
1C.17	Current tax liabilities	Corporation tax payable consists of any balances of corporation tax due to HMRC.
1C.18	Provisions	Total provisions for liabilities and charges due within one year. Includes deferred income – grants and contributions and all other provisions including restructuring or reorganisation provisions.
1C.19	Total current liabilities	All creditors due to be paid within one year. Equal to the sum of lines 1C.13 to 1C.18.
1C.20	Net current assets/ (liabilities)	Historical cost net current assets. Equal to the sum of lines 1C.12 and 1C.19.
1C.21	Trade & other payables	Trade creditors, accrued interest and any other accruals or creditors due after more than one year that are not borrowings, tax creditors, capex creditors or liabilities arising from derivative financial instruments.
1C.22	Borrowings	Balances due after more than one year which comprise:
		obligations under leases;
		loans due to other group companies;
		redeemable debentures;
		bonds;
		commercial paper;
		bills of exchange;
		bank loans; and
		any other borrowings.
		Accrued interest on borrowings should not be included.
1C.23	Financial instruments	Difference between book value and fair value of any non- current liabilities relating to financial instruments, including options, futures, forwards and swaps, which are presented at fair value in the statutory accounts.
1C.24	Retirement benefit obligations	The total amount due to employees in the pension scheme for all of the past service completed up to the balance sheet date, less scheme assets. Where this calculation results in a net liability it should be shown in this line.
1C.25	Provisions	Total provisions for liabilities and charges due after one year not included elsewhere in the table. Includes restructuring or reorganisation provisions.
1C.26	Deferred income – grants & contributions	Balance of deferred income relating to capitalised grants and contributions received.

Line	Title	Definition
1C.27	Deferred income – adopted assets	Balance of deferred income relating to adopted assets.
1C.28	Preference share capital	Nominal value of the preference share capital.
1C.29	Deferred tax	Provision for tax liabilities arising from timing differences between the recognition of gains and losses in the financial statements and their recognition in a tax computation. (A deferred tax asset should be entered as a positive number.)
1C.30	Total non-current liabilities	Total creditors due after one year. Equal to the sum of lines 1C.21 to 1C.29.
1C.31	Net assets	Total assets employed by the business under the historical cost accounting convention. Equal to the sum of lines 1C.7, 1C.20 and 1C.30.
1C.32	Called up share capital	Nominal value of the ordinary shares of the company which are issued and fully paid.
1C.33	Retained earnings and other reserves	Cumulative balance of historical cost profits retained and any other reserves, other than called up share capital.
1C.34	Total Equity	Total of shareholders' funds. The sum of called up share capital, share premium, profit and loss account, and other reserves. This equals line 1C.31.

Pro forma 1D: Statement of cash flows

Line	Title	Definition
1D.1	Operating profit	Operating profit before tax and interest. This is equal to line 1A.4.
1D.2	Other income	The cash impact of 'other income' in line 1A.5.
1D.3	Depreciation	The negative value of depreciation and amortisation of tangible and intangible assets.
1D.4	Amortisation – Grants & contributions	The statutory values in the first column should be offset by adjustments such that any amortisation will be recorded as 'other income' in the regulatory accounts.
1D.5	Changes in working capital	The total movement in working capital.
1D.6	Pension contributions	Any difference between the pension contributions paid in the year and the charge included in the total operating expenditure in 2B.14.
1D.7	Movement in provisions	The negative value of any other non-cash profit and loss items which affect operating profit.
1D.8	Profit on sale of fixed assets	The negative value of net current cost profit/loss on disposal of fixed assets.
1D.9	Cash generated from operations	Net cash flow movement from the operating activities of the company. The sum of lines 1D.1 to 1D.8.
1D.10	Net interest paid	All cash interest received less all cash interest paid in the period. Including interest receipts and payments under swap arrangements, interest on lease rentals and non-equity dividends paid. Net Interest excludes any accretion of index linked debt which is a non-cash item.

Line	Title	Definition
1D.11	Tax paid	All cash flows to or from taxation authorities (or other group companies) in respect of the company's revenue and capital profits including corporation tax paid/received and group taxation payments/receipts by the company in the year.
1D.12	Net cash generated from operating activities	The sum of lines 1D.9 to 1D.11.
1D.13	Capital expenditure	Gross purchase price of fixed assets paid before the deduction of any grants and contributions.
1D.14	Grants and contributions	All grants and contributions which are accounted for as reductions in capital expenditure. This may not agree to grants and contributions recorded in table 2E, which covers ALL grants and contributions.
1D.15	Disposal of fixed assets	Cash proceeds received in the year on the sale of fixed assets
1D.16	Other	Other movements not already included in lines 1D.13 to 1D.15.
1D.17	Net cash used in investing activities	The net cash flow of the company relating to the acquisition or disposal of any asset held as a fixed asset. The sum of lines 1D.13 to 1D.16.
1D.18	Net cash generated before financing activities	The sum of lines 1D.12 and 1D.17.
1D.19	Equity dividends paid	The total equity dividend paid by the company in the year. This includes any special dividends paid in the year.
1D.20	Net loans received	The receipts from any loans taken out in the year. These include the proceeds of any loans taken out from other group companies. Repayments should be netted off.
1D.21	Cash inflow from equity financing	The net proceeds of any share issues received in the year, less the cost of any share buy backs.
1D.22	Net cash generated from financing activities	The net effect on cash flow after repaying the capital element of leases, raising /repaying loans and share issues. The sum of lines 1D.19 to 1D.21.
1D.23	Increase/(decrease) in net cash	The net cash flow of the company in the year measured by the change in the level of cash. The sum of lines 1D.18 and 1D.22.

Pro forma 1E: Net debt analysis (appointed activities) at 31 March 20xx

1.2 Figures for this table should be derived using granular data on financial instruments embedded in company balance sheets. Companies should include all debt relevant to the regulated company, even where this has been taken out by an associate or financing subsidiary. This granular data should be set out in Table 4B: 'Analysis of debt', which we are requesting from companies as part of their submission. Unless otherwise indicated, borrowings should be entered as positive numbers in the Table 1E pro forma.

Line	Title	Definition
1E.1	Borrowings (excluding preference shares)	 Borrowings such as: obligations under leases; loans due to other group companies; redeemable debentures; bonds; commercial paper; bills of exchange; bank loans; and any other borrowings (including bank overdrafts). The following should not be included: accrued interest on borrowings; mains deposits; issuance costs or transaction costs; premiums or discounts; fair value accounting adjustments which do not impact on the principal sum outstanding on the debt or the total interest paid. For example when financial instruments, such as interest rate swap agreements are presented at fair value. liabilities arising per IFRS16 in connection with the recognition of DPC arrangements on the balance sheet of the regulated company. Where there is a difference between 'Borrowings' as reported in column 'Total appointed activities' of table 1C (i.e. the sum of lines 1C.15 and 1C.22) and table 1E a reconciliation should clearly explain the rationale for making the adjustment. Where borrowings have been swapped, the principal outstanding should be assigned to categorise based on the nature of the payable leg of the swap (e.g. a loan swapped from fixed to floating should be categorized as floating).
1E.2	Preference share capital	Nominal value of the preference share capital. This should equal 'Preference share capital' as reported in column 'Total appointed activities' of table 1C (i.e. line 1C.28).
1E.3	Total borrowings	The sum of lines 1E.1 and 1E.2.
1E.4	Cash	Cash in hand and at bank at the year-end. This should be entered as a negative number.
1E.5	Short term deposits	Investments which are readily convertible into known amounts of cash. This may include deposits made with group companies. This should be entered as a negative number.
1E.6	Net Debt	The sum of lines 1E.3 to 1E.5.
1E.7	Gearing	Regulatory gearing calculated as net debt in 1E.6 divided by RCV in 4C.31.
1E.8	Adjusted gearing	Some companies may use a different measure of net debt to calculate gearing for the purposes of financial covenants which are of use to the financial community. If a different measure of debt is commonly used by a company, then the restated gearing level should be inserted in this line.
1E.9	Full year equivalent nominal interest cost	Full year equivalent nominal interest cost as at 31 March. Calculated as the 'Nominal interest rate' multiplied by the 'Principal sum as at 31 March'.

Line	Title	Definition
		Nominal interest rate is defined as the coupon associated with nominal debt or equivalent implied by the coupon of index linked debt. The nominal interest rate should not include accounting adjustments relating to amortisation of issuance costs or premium / discount. Rates entered for borrowings in hedging relationships should be stated at the post hedge interest rate.
		Processing rule for nominal interest rate: Fixed rate instruments: The coupon rate as an input. Floating rate instruments: The margin plus/minus the Reference Interest Rate observed on 31 March.
		Index-linked instruments: Nominal interest rate = ((1 + real coupon) x (1 + RPI or CPI/CPIH)) – 1. The principal sum outstanding should not be adjusted for accounting adjustments such as unamortised issuance costs. RPI and CPI /CPIH should be the latest annualised March monthly figure reported by ONS.
		Processing rule for principal sum: The principal sum should not include amounts relating to debt issuance costs or premium / discount. Fixed rate and floating rate instruments:
		In most instances this will be the principal sum at initial recognition of the instrument. For instruments with stepped principal repayments, the principal sum is the sum outstanding as at 31 March not including amounts relating to issuance costs or premium / discount
		Index-linked instruments: The principal sum outstanding at 31 March, i.e. the principal sum at initial recognition plus indexation of the principal. Foreign currency instruments:
		The Sterling equivalent upon which interest is calculated. Swaps that are not in designated hedging arrangements: The paid and received legs should be reported separately in the appropriate categories within the table. The notional value of the swap should be reported as the principal sum, with the received leg reported as a negative principal sum.
1E.10	Full year equivalent cash interest payment	Full year equivalent cash interest payment at 31 March. Processing rule: Fixed rate instruments and floating rate instruments: Copied from 'Full year equivalent nominal interest cost'. Index linked instruments: Calculated as the 'Real coupon' multiplied by the 'principal sum as at 31 March'.
1E.11	Indicative weighted average nominal interest rate	The sum of line 1E.9 divided by 1E.3

Line	Title	Definition
1E.12	Indicative weighted average cash interest rate	The sum of line 1E.10 divided by 1E.3
1E.13	Weighted average years to maturity	Calculated as the multiple of the principal sum and years to maturity for each non-swap instrument divided by the principal sum outstanding as at 31 March for fixed, floating and index linked instruments on which interest payments are calculated.
		Definition of years to maturity:
		Full years to maturity of the instrument from 31 March.
		The weighted average years to maturity calculation should not include swaps.
		Where debt instruments have scheduled repayments, each repayment should be treated separately for calculating the weighted average years to maturity.
		Instruments with no fixed maturity should be reported as follows:
		Instruments that are instantly callable should be classified as loans due in less than one year.
		Inter-company loans should be matched with the instrument at group level at the external borrowing rate.
		Instruments with no fixed maturity that are not instantly callable should be reported with a maturity of 25 years.
		Due to the differences in the calculation involved, it is not essential that this calculation reconciles to the weighted average years to maturity figure in 4B.816

Pro forma 1F: Financial flows for the 12 months ended 31 March 20xx and for the price review to date (2017-18 financial year average RPI)

- 1.3 All £m values should be entered in 2017-18 price base.
- 1.4 Values should be converted using the average CPIH figure for the reporting year./ price control period using the Fisher equation to convert nominal interest rates to real $-(1+n)=(1+r)^*(1+i)$.
- 1.5 Percentage change values should be calculated to 2 decimal places.
- 1.6 Table 1F should be completed on the same basis as other section 1 tables, taking account of all debt relevant to the regulated company, even where this has been taken out by an associate or financing subsidiary.
- 1.7 Guidance on how to account for the PR19 Blind Year reconciliation will form part of a later consultation.

Line	Title	Notional returns and notional regulatory equity	Actual returns and notional regulatory equity	Actual returns and actual regulatory equity
1F.1	Regulatory Equity	The values to be used for notional regulatory equity for the reporting period will be included in Ofwat's publication <u>Regulatory capital</u> <u>values</u> .	The values to be used for notional regulatory equity for the reporting period are those which will be included in Ofwat's publication <u>Regulatory</u> <u>capital values</u> .	Calculated as the average of the opening and closing RCV published in Ofwat's publication <u>Regulatory capital</u> <u>values</u> , less average net debt (using the opening and closing balances, for the reporting period, as reported in table 1E. NB: do not use the 'average' RCV value stated in the 'Regulatory Capital Values' publication.) Alternatively, companies can use the RCV annual indexation model to calculate the actual regulatory equity by entering the actual closing gearing, in line 211 'Closing actual gearing (manual input)' on the 'Input' tab, for the reporting year in the RCV annual indexation model published on the Ofwat website. The actual regulatory equity for the reporting period will be shown on the 'Summary Dashboard' tab, row 80. Note: The calculation is only required for the current reporting period, relevant values for prior periods will be included in Ofwat's publication <u>Regulatory capital values</u> . This will also contain the relevant deflated RCV values to be used in the calculation for the reporting year.
1F.2	Return on Regulatory Equity	The values to be used for allowed equity return will be published in Ofwat's Financial Flows data reference document on our website, alongside the annual publication of the Regulatory Capital Values.	The impact on the allowed Return on Regulatory Equity Base of departing from the notional gearing structure. Calculated as the allowed equity return on the actual regulatory equity base (average RCV less average actual Net Debt), expressed as a percentage of the notional regulatory equity base.	The values to be used for allowed equity return, will be published in Ofwat's Financial Flows data reference document on our website alongside the annual publication of the Regulatory Capital Values.

Line	Title	Definition
1F.3	Impact of movement from notional gearing	 The impact of having a different gearing level to that assumed in the notional company structure. The basis of the calculation is outlined below: a) the difference between the notional gearing ratio (60.0%) and actual average gearing (using the opening and closing balances, for the reporting period, unless the company considers that a weighted average is more accurate) as reported in table 1E (Net Debt)
		 b) the difference between the adjusted allowed return on regulatory equity - base and the allowed cost of debt (CPIH adjusted) as set in the final determination c) multiplying a) x b) d) multiplying c) by the average RCV
		The inputs for this line row calculated using values in line 1F.2.
		To calculate line 1F.3 for column actual returns and notional regulatory equity (%), use the figure in line 1F.2 column notional returns and notional regulatory equity (%) minus the figure in line 1F.2 column actual returns and notional regulatory equity (%). (The combination of lines 1F.1 and 1F.3 sum to the base return on equity in the RoRE calculation)
		To calculate line 1F.3 for column actual returns and actual regulatory equity (%), use the figure in line 1F.1 column actual returns and actual regulatory equity (%) and divide by the figure in line 1F.3 column actual returns and actual regulatory equity (£M).
		Note: The adjustment applies to both the actual returns and notional regulatory equity column and the actual returns and actual regulatory equity column No adjustment should be made for corporation tax Net debt includes any preference shares
1F.4	Gearing benefits sharing	The value of the benefit attributable to customers, calculated in accordance with the methodology set out in the published document, PR19 final determinations: Aligning risk and return technical appendix (reported on an accruals basis). Note:
		No adjustment should be made for corporation tax If the calculation produces a positive value (due to volatile changes in the rate on inflation during the reporting the period), companies should report a zero value for the reporting year.
1F.5	Variance in Corporation Tax	The difference between the amount allowed in the Final Determination for corporation tax as published in Ofwat's Financial Flows data reference document on our website alongside the annual publication of the Regulatory Capital Values less:
		tax payable at the standard rate of corporation tax on the profit /(loss) on appointed activities only before any fair value adjustments (Line 1A.9). plus. or minus any adjustment for accelerated or deferred capital allowances – except in relation to green recovery expenditure which should be excluded plus, or minus any amounts for prior year adjustments plus, or minus other final determination adjustments to accounting profit
1F.6	Group Relief	The amount of group relief utilised in calculating the amount of corporation payable minus any amounts paid by way of compensation for the transfer of the group relief, from the parent or affiliated undertaking.
		Group relief transferred between the non-appointed and appointed activities withing the regulated company should not be included.

Line	Title	Definition
1F.7	Cost of Debt	Calculated as the Cost of Debt (unadjusted for Hedging Instruments) ¹ less Line 1F.8.
		Note: No adjustment should be made for corporation tax
		The Fisher equation should be applied to the calculation

e) Note 1 - Calculating Cost of Debt (unadjusted for hedging instruments): Actual returns and notional regulatory equity

Impact of the actual cost of debt compared to the allowed cost of debt in the published Final Determination.

Calculated by:

- a) taking net actual interest charge (interest charge on loans, borrowings, finance leases and adjustments associated with indexation for inflation), less any interest received on cash and short term deposits as reported in the Income statement. All other items should be excluded, including any intercompany interest.
- b) divided by the average net debt (calculated using the opening and closing balances, for the reporting period,)
- c) Less;
 - movement in CPIH for the reporting period, calculated as the movement in the CPIH financial year average for the reporting period and prior year (using the Fisher equation), and
 - allowed cost of debt. The value to be used will be published in Ofwat's Financial Flows data reference document on our website alongside the annual publication of the Regulatory Capital Values.
- d) multiplying c) by the average RCV (as defined in paragraph 1F.2) for the period
- e) Multiplying d) by the notional gearing ratio (60.0%)
- N.B: The impact of cross currency swaps should not be included in line 1F.8 so as to avoid duplication.

Note 1 - Calculating Cost of Debt (unadjusted for hedging instruments): Actual returns and actual regulatory equity

Impact of the actual cost of debt compared to the allowed cost of debt in the published Final Determination.

Calculated by:

- a) taking net actual interest charge (interest charge on loans, borrowings, finance leases and adjustments associated with indexation for inflation), less any interest received on cash and short-term deposits as reported in the Income statement. All other items should be excluded, including any intercompany interest.
- b) divided by the average net debt (using the opening and closing balances for the reporting period,)
- c) Less;
 - movement in CPIH for the reporting period, calculated as the movement in the CPIH financial year average for the reporting year and prior year (using the Fisher equation), and
 - allowed cost of debt. The value to be used will be published in Ofwat's Financial Flows data reference document on our website alongside the annual publication of the Regulatory Capital Values.
- d) multiplying c) by the average RCV (as defined in paragraph 1F.2) for the period
- e) multiplying d) by the actual average gearing ratio (calculated using the opening and closing balance for the reporting period, unless the company considers that a weighted average is more appropriate).

N.B: The impact of cross currency swaps should not be included in line 1F.8 so as to avoid duplication.

Line	Title	Definition
1F.8	Hedging Instruments	The Income statement impact of hedging instruments on the actual cost of debt. This figure is calculated by the company. No adjustment should be made for corporation tax.
1F.9	Return on regulatory equity including Financing adjustments	The sum of lines 1F.3 to line 1F.8 plus line 1F.2
1F.10	Totex out / (under) performance	The difference between the actual totex performance versus the amount allowed in the published Final Determination, for the reporting period, adjusted for the following: Timing differences

Line	Title	Definition
		Company sharing ratio with customers Actual expenditure on innovation projects funded through the innovation competition
		This data should be the sum of the data reported in lines 4C.13, 4C.14, 4C.21 and line 4C.24, converted into a 2017-18 price base.
		No adjustment should be made for corporation tax.
1F.11	ODI out / (under) performance	The ODI out / under performance as reported in table 3A, for the in-period and notional outperformance payments and underperformance payments relating to the reporting period only. Note: the value in table 3A is already reported in 2017-18 prices so no further conversion is required. No adjustment should be made for corporation tax.
1F.12	C-Mex out / (under) performance	We will publish each year on our website the values to be
16.15	C-Mex out / (under) performance	reported in the Annual Performance Report for that reporting year, these will be on an accruals basis. No adjustment should be made for corporation tax.
1F.13	D-Mex out / (under) performance	We will publish each year on our website the values to be reported in the Annual Performance Report for that reporting year, these will be on an accruals basis. No adjustment should be made for corporation tax.
1F.14	Retail out (under) performance	The difference between the allowance for retail operating costs, excluding margin, for Residential Retail and Business Retail in the Final Determination compared to the actual costs as reported in table 2C – Operating cost analysis – retail. The allowance for Residential retail costs will be published in Ofwat's Financial Flows data reference document on our website alongside the annual publication of the Regulatory Capital Values. No adjustment should be made for corporation tax.
1F.15	Other exceptional items	Exceptional items that are outside the normal operating activities eg Land Sales, regulatory fines or legal penalties. When including the impact for proceeds from land sales then this should be adjusted to reflect the mechanism where this benefit is split 50:50 with customers. Companies should also provide a supporting narrative detailing the components of the reported value. No adjustment should be made for corporation tax.
1F.16	Operational performance total	The sum of lines 1F.10 to line 1F.15
1F.17	RORE (return on regulatory equity)	The sum of lines 1F.9 and line 1F.16
1F.18	RCV Growth	The values to be used will be included in Ofwat's publication <u>Regulatory capital values</u> (On the 'Summary Dashboard' tab, line 85 as part of the summary table).
1F.19	Voluntary sharing arrangements	The value of any payment associated with voluntary sharing arrangements or similar schemes as set out in the published document, PR19 final determination: Aligning risk and return technical appendix, i.e. cost of embedded debt sharing mechanism, contribution to affordability / hardship funds. Please provide a supporting narrative explaining the values reported.

Line	Title	Definition
		No adjustment should be made for corporation tax.
1F.20	Total Shareholder Return	The sum of line 1F.17 to line 1F.19.
1F.21	Gross Dividend	The total amount of dividends paid during the period for the appointee business only.
1F.22	Interest receivable on intercompany loans	The amount of dividend paid corresponding to the payment of interest income received on loans from the appointee to related companies (as included in the P&L Account. No adjustment should be made for corporation tax.
1F.23	Retained Value	Line 1F.20 minus line 1F.21 and line 1F.22

The following lines are for information only and relate to the cash impact of any actual performance adjustments for 2015-20

Line	Title	Definition
1F.24	Totex out / (under) performance	The value used should be the end of period performance adjustments from the previous AMP, sourced from the Financial Flows data allowances model published on our website.
1F.25	ODI out / (under) performance	The value used should be the end of period performance adjustments from the previous AMP, sourced from the Financial Flows data allowances model published on our website.
1F.26	Total out / (under) performance	The sum of line 1F.24 and 1F.25

2. Definitions of terms; tables 2A-20 (price review and other segmental reporting)

2.1 Note that references to 'additional control' relate to additional controls that some companies have, such as Thames Tideway.

Pro forma 2A: Segmental income statement for the 12 months ended 31 March 20xx

Line	Title	Definition
2A.1	Revenue – price control	Total revenue covered by the price control split over the price controls units. Revenue values should be copied from table 21.
2A.2	Revenue – non price control	Other revenue from appointed activities, not covered by the price control recorded under each price controls unit (see appendix 1). The total of 2A.1 & 2A.2 should equal 1A.1.
2A.3	Operating expenditure – excluding PU recharge impact	Operating expenditure excluding the impact of the principal use (PU) recharge split over the retail price controls units. Retail: Calculated as (2C.8+2C.19+2C.20) multiplied by -1. Wholesale: Input the opex recorded before the impact of the PU recharges.
2A.4	PU opex recharge	Retail: Calculated as 2C.17 multiplied by -1. Wholesale: Calculated as 2A.5 minus 2A.3.
2A.5	Operating expenditure – including PU recharge impact	Retail – the sum of 2A.3 and 2A.4. Wholesale – copied from 2B (and multiplied by -1) as all wholesale operating cost information will include the impact of any recharges between price control units.
2A.6	Depreciation - tangible fixed assets	Depreciation of tangible fixed assets. Copied from 2D.10. The fixed asset summary that this cell copies from will have assets in their principal allocation price control unit.
2A.7	Amortisation - intangible fixed assets	Amortisation of intangible fixed assets. Copied from 20.10. The fixed asset summary that this cell copies from will have assets in their principal allocation price control unit.
2A.8	Other operating income	Other operating income split over the price controls units. Total should reconcile to 1A.3.
2A.9	Operating profit	Operating profit. The sum of lines 2A.1, 2A.2, 2A.5, 2A.6, 2A.7 and 2A.8.
2A.10	Surface water drainage rebates	Total value of surface water drainage rebates paid or credited to customers' accounts in the year where the customer has challenged the proportion of their site that is connected for surface water.

Pro forma 2B: Totex analysis for the 12 months ended 31 March 20xx – by wholesale price controls

Line	Title	Definition
2B.1	Power	All energy costs, including the climate change levy and the carbon reduction commitment. Any cost savings from power generated internally should be netted off these costs. Copied from 4J.1 and 4K.1
2B.2	Income treated as negative expenditure	 Income received from sales which are external to the appointed business and which directly relate to the water and wastewater processes. It should be input as a negative number. This will include; Electricity sales from sources such as Hydro, PV, wind and CHP to external parties. Electricity sales from back-up generators under arrangements such as the National Grid 'STOR', "frequency response" and "dynamic demand". Bio-methane gas sales to the National Grid. Sludge and sludge products such as cake, granules etc. to external parties. Copied from 4J.2 and 4K.2
2B.3	Service charges/ discharge consents	Total cost of service charges by the Environment Agency / Natural Resources Wales or the Canal & River Trust for discharge consents. Sum of 4J.8-10 Sum of 4K.8-10
2B.4	Bulk Supply/Bulk discharge	Total payments for bulk imports/exports. Where a company jointly owns a supply, the costs associated with it should not be reported here but in the appropriate cost line. Copied from 4J.3 and 4K.3
2B.5	Renewals expensed in year (Infrastructure)	Infrastructure renewals which are expensed rather than capitalised in the statutory accounts. 'Renewals' are generally planned activities to replace significant lengths of pipework or parts of an asset. These are targeted at improving network performance or solving ongoing problems and restores an asset to full capability. Copied from 4J.4 and 4K.4
2B.6	Renewals expensed in year (Non- Infrastructure)	Non-infrastructure renewals which are expensed rather than capitalised in the statutory accounts. 'Renewals' are generally planned activities targeted at improving network performance or solving ongoing problems and restores an asset to full capability. Copied from 4J.5 and 4K.5
2B.7	Other operating expenditure (including Location specific costs & obligations)	Other operating costs not covered by 2B.5 and 2B.6. This should exclude finance charges associated with operating leases. Sum of 4J.6, 11-13 Sum of 4K.6, 11-13
2 B .8	Local authority and Cumulo rates	The cost of local authority rates. This should include both the local authority rates, cumulo rates and sewerage site rates (where appropriate). Copied from 4J.7 and 4K.7
2B.9	Total base operating expenditure	The sum of lines 2B.1 to 2B.8

Line	Title	Definition
2B.10	Enhancement operating expenditure	Total enhancement operating expenditure Copied from 4D.2 and 4E.2
2 B .11	Developer services operating expenditure	Total developer services operating expenditure including third party services opex. Copied from 4D.3 and 4E.3
2B.12	Total operating expenditure excluding third party services	Total operating costs excluding base and enhancement third party services but including developer services third party services. The sum of lines 2B.9 to 2B.11.
2B.13	Third party services	Operating expenditure for providing third party services. Eg Bulk supplies, supplies of non-potable water and rechargeable works where the appointee is a monopoly supplier. Excludes developer services third party services opex as this is included in line 2B.11.
2 B .14	Total operating expenditure	Total operating expenditure for the wholesale business only within each business category. The sum of lines 2B.12 and 2B.13. This should reconcile to 2A.5.
2 B .15	Grants and contributions - operating expenditure	Grants and contributions – operating expenditure. The sum of 2B.15 and 2B.22 equals lines 2E.7 for water resources, 2E.20 for water network plus, and 2E.32 for wastewater network plus respectively.
2B.16	Base capital expenditure	Capital expenditure excluding third party capex to maintain the long term capability of assets and to deliver base levels of service. Where projects have drivers both of enhancement and capital maintenance, companies should apply a method of proportional allocation to allocate costs between enhancement and capital maintenance. Copied from 4D.8 and 4E.8.
2B.17	Enhancement capital expenditure	Total enhancement capital expenditure. Copied from 4D.9 and 4E.9.
2B.18	Developer services capital expenditure	Total developer services capital expenditure including third party services capex. Copied from 4D.10 and 4E.10.
2B.19	Total gross capital expenditure excluding third party services	Total gross capital expenditure excluding base and enhancement third party services but including developer services third party services. The sum of lines 2B.16 to 2B.18.
2B.20	Third party services	Capital expenditure for providing third party services. E.g. Bulk supplies, supplies of non-potable water and rechargeable works where the appointee is a monopoly supplier Excludes developer services third party services capex as this is included in line 2B.18.
2B.21	Total gross capital expenditure	The sum of lines 2B.19 and 2B.20.
2B.22	Grants & contributions - capital expenditure	Grants and contributions - capital expenditure. The sum of 2B.15 and 2B.22 equals lines 2E.7 for water resources, 2E.20 for water network plus, and 2E.32 for wastewater network plus respectively.
2B.23	Net totex	The sum of lines 2B.14 and 2B.21 less the sum of lines 2B.15 and 2B.22.
2B.24	Pension deficit recovery payments	Actual pension deficit recovery payments including costs capitalised and any group recharges for pension deficit costs. Companies that report under FRS102 should include the element of the statutory

Line	Title	Definition
		charge attributable to deficit payments in this line rather than block A above.
2 B .25	Other cash items	Other cash items not included in totex.
2B.26	Totex including cash items	The sum of lines 2B.23 to 2B.25.

Pro forma 2C: Cost analysis for the 12 months ended 31 March 20xx – retail

2.2 Property types are defined in chapter 3.

Line	Title	Residential	Business
2C.1	Customer services	The costs associated with providing the following services for the appointee's household. Billing. Payment handling, remittance and cash handling. Charitable trust donations. Vulnerable customer schemes. Non-network customer enquiries and complaints. Network customer enquiries and complaints Investigatory visits (where the cause of the investigation is not a network issue) Excludes customer services costs incurred in providing services to a third party's customers (eg. where a WoC bills and collect payment on behalf of a WaSC).	The costs associated with providing the following services for non-household customers. Billing. Payment handling, remittance and cash handling. Non-network customer enquiries and complaints. Network customer enquiries and complaints. Investigatory visits (where the cause of the investigation is not a network issue)
2C.2	Debt management	All costs relating to the management of debt recovery for the appointee's household customers – monitoring of outstanding debt, including issue of reminders and follow up telephone calls, managing and monitoring field recovery of debt, includes costs of customer visits, managing and monitoring external debt collection routes including debt collection agencies and legal. Excludes costs incurred relating to the management of debt recovery for a third party's customers (eg. where a WoC manages debt on behalf of a WaSC).	All costs relating to the management of debt recovery for non-household – monitoring of outstanding debt, including issue of reminders and follow up telephone calls, managing and monitoring field recovery of debt, includes costs of customer visits, managing and monitoring external debt collection routes including debt collection agencies and legal, including notification of disconnections to non- household customers.

Line	Title	Residential	Business
2C.3	Doubtful debts	The charge/credit to the profit and loss account for bad and doubtful debts for household customers. This should include only the appointee's doubtful debts and not doubtful debts relating to a third party.	The charge/credit to the profit and loss account for bad and doubtful debts for non- household. This should include only the appointee's doubtful debts and not doubtful debts relating to a third party.
2C.4	Meter reading	Costs associated with meter reading for household customers – including ad hoc read requests, cyclical reading, scheduling, transport, physical reading, reading queries and read processing costs, managing meter data plus supervision and management of meter readers. Income from meter reading commission should be netted off these costs. Excludes costs associated with meter reading for third parties.	Costs associated with meter reading for non- household customers – including ad hoc read requests, cyclical reading, scheduling, transport, physical reading, reading queries and read processing costs, managing meter data plus supervision and management of meter readers. Income from meter reading commission should be netted off these costs. Excludes costs associated with meter reading for third parties.
2C.5	Services to developers	Not applicable for household.	The operating costs of providing services to developers, to include: provide developer information – deal with questions from developers where physical aspects of infrastructure are required to change, investigate and advise on implications; provide connections for developers – including project management, contracting with third parties; and administration for new connections.

Line	Title	Residential	Business
2C.6	Other operating expenditure	Any other operating costs (ie, excluding interest and taxation) incurred serving household customers, on an aggregated basis. Include the costs of (among other costs): provision of offices; insurance premiums; net retail expenditure on demand- side water efficiency initiatives; net retail expenditure on customer side leaks; other direct costs; general and support expenditure; other business activities.	Any other operating costs (ie, excluding interest and taxation) incurred serving non- household customers, on an aggregated basis. Include the costs of (among other costs): provision of offices; insurance premiums; disconnections; demand-side water efficiency initiatives; customer side leaks; other direct costs; general and support expenditure; other business activities.
2C.7	Local authority and cumulo rates	The cost of local authority rates. This should include both the local authority and cumulo rates. Only costs related to serving household customers to be included.	The cost of local authority rates. This should include both the local authority and cumulo rates. Only costs related to serving non-household customers to be included.
2C.8	Total operating expenditure excluding third party services	The sum of lines 2C.1 to 2C.7.	The sum of lines 2C.1 to 2C.7.
2C.9	Depreciation (tangible fixed assets) on assets existing at 31 March 2015	Depreciation charge on assets which existed before 1 April 2015 (ie assets included in wholesale RCV) wholly or principally used by household retail (as defined in chapter 2 of RAG 2). Depreciation excludes amortisation of deferred credits and intangible fixed assets.	Depreciation of assets which existed before 1 April 2015 (ie assets included in wholesale RCV) wholly or principally used by non-household retail (as defined in chapter 2 of RAG 2). Depreciation excludes amortisation of deferred credits and intangible fixed assets.
2C.10	Depreciation (tangible fixed assets) on assets acquired after 1 April 2015	Depreciation charge on assets acquired after 1 April 2015 wholly or principally used by household retail. Depreciation excludes amortisation of deferred credits and intangible fixed assets.	Depreciation charge on assets acquired after 1 April 2015 wholly or principally used by non-household retail. Depreciation excludes amortisation of deferred credits and intangible fixed assets.
2C.11	Amortisation (intangible fixed assets) on assets existing at 31 March 2015	Amortisation of intangible assets which existed before 1 April 2015 (ie assets included in wholesale RCV) wholly or principally used for the household retail business.	Amortisation of intangible assets which existed before 1 April 2015 (ie assets included in wholesale RCV) wholly or principally used for the non- household retail business.

Line	Title	Residential	Business
2C.12	Amortisation (intangible fixed assets) on assets acquired after 1 April 2015	Amortisation of intangible assets acquired after 1 April 2015 wholly or principally used for the household retail business.	Amortisation of intangible assets acquired after 1 April 2015 wholly or principally used for the non-household retail business.
2C.13	Recharge from wholesale for legacy assets principally used by wholesale (assets existing at 31 March 2015)	Where a legacy asset (asset existing before 31 March 2015) is principally used by wholesale, the capex and depreciation should be recorded in wholesale with a recharge made to household retail to reflect the proportion of the asset used by residential retail. The recharge to residential retail should be recorded in this line. This line should be entered as positive values. Recharges should cover depreciation, repair and maintenance costs only and should not include a return on the asset.	N/A
2C.14	Income from wholesale for legacy assets principally used by retail (assets existing at 31 March 2015)	Where a legacy asset (asset existing before 31 March 2015) is principally used by retail, the capex and depreciation should be recorded in retail with a recharge made to wholesale to reflect the proportion of the asset used by wholesale. The corresponding income to residential retail should be recorded in this line. This line should be entered as positive values. Recharges should cover depreciation, repair and maintenance costs only and should not include a return on the asset.	N/A
2C.15	Recharge from wholesale assets acquired after 1 April 2015 principally used by wholesale	Where an asset acquired after 1 April 2015 is principally used by wholesale, the capex and depreciation should be recorded in wholesale with a recharge made to household retail to reflect the proportion of the asset used by residential retail. The recharge to residential retail should be recorded in this line. This line should be entered as positive values. Recharges should cover depreciation, repair and maintenance costs only and should not include a return on the asset.	N/A

Line	Title	Residential	Business
2C.16	Income from wholesale assets acquired after 1 April 2015 principally used by retail	Where an asset acquired after 1 April 2015 is principally used by retail, the capex and depreciation should be recorded in retail with a recharge made to wholesale to reflect the proportion of the asset used by wholesale. The corresponding income to residential retail should be recorded in this line. This line should be entered as positive values. Recharges should cover depreciation, repair and maintenance costs only and should not include a return on the asset.	N/A
2C.17	Net recharges costs	Net recharges costs for residential retail. The sum of lines 2C.13 and 2C.15 minus sum of lines 2C.14 and 2C.16.	N/A
2C.18	Total retail costs excluding third party and pension deficit repair costs	Total costs in respect of the household retail business (excluding third party and pension deficit repair costs). The sum of lines 2C.8 to 2C.12 plus 2C.17.	Total costs in respect of the non-household retail business (excluding third party and pension deficit repair costs). The sum of lines 2C.8 to 2C.12 plus 2C.17.
2C.19	Third party services operating expenditure	The operating costs of providing appointed household retail services to third parties.	The operating costs of providing appointed non- household retail services to third parties.
2C.20	Pension deficit repair costs	Actual pension deficit recovery payments in household retail including costs capitalised and any group recharges for pension deficit costs.	Actual pension deficit recovery payments in non-household retail including costs capitalised and any group recharges for pension deficit costs.
2C.21	Total retail costs including third party and pension deficit repair costs	Total costs in respect of the household retail business (including third party and pension deficit repair costs). The sum of lines 2C.18 to 2C.20.	Total expenditure in respect of the non-household retail business (including third party and pension deficit repair costs). The sum of lines 2C.18 to 2C.20.
2C.22	Debt written off	Water and/ or sewerage outstanding debts that have been written off for the appointee's household customers in the report year, net of collections of previously written off debt. Write-offs in relation to court or other debt recovery costs should not be included.	Water and/ or sewerage outstanding debts that have been written off for non- household customers in the report year, net of collections of previously written off debt. Write-offs in relation to court or other debt recovery costs should not be included.
2C.23	Capital expenditure	Household element of capital expenditure on assets principally used by retail.	Non-household element of capital expenditure on assets principally used by retail.

Line	Title	Residential	Business
2C.24	Demand-side water efficiency - gross expenditure	The total retail operating costs of providing water efficiency services to household customers, including: Promotion of water saving initiatives - Production of customer literature and customer awareness campaigns; Retro-fitting of water saving devices – Provision of advice and devices to customers; Water efficiency audits – water and energy conservation, optimisation of systems, advice and investigations into usage; Data logging	N/a
2C.25	Demand-side water efficiency - expenditure funded by wholesale	The retail operating costs of providing water efficiency services (as defined in 2C.24) to household customers that are funded by the wholesale business	N/a
2C.26	Demand-side water efficiency - net retail expenditure	The retail operating costs of providing water efficiency services (as defined in 2C.24) to household customers net of any operating costs that are funded by the wholesale business Line 2C.24 less line 2C.25.	N/a
2C.27	Customer-side leak repairs - gross expenditure	The total retail operating costs associated with household customer side leaks, to include: Investigations - Activities from enquiries relating to customer-side leaks, including site visits, the use of pipe locating equipment and any attendance on sites during excavations; Resolution – Activities comprising pipe repairs and replacement; Free leak repairs	N/a
2C.28	Customer-side leak repairs - expenditure funded by wholesale	The retail operating costs associated with household customer side leaks (as defined in 2C.27) that are funded by the wholesale business.	N/a
2C.29	Customer-side leak repairs - net retail expenditure	The retail operating costs associated with household customer side leaks (as defined in 2C.27) net of any operating costs that are funded by the wholesale business Line 2C.27 less line 2C.28.	N/a

Line	Title	Residential	Business
2C.30	Cumulative actual retail expenditure to reporting year end	Cumulative total retail expenditure for the period 2020-25 to reporting year end. This is calculated as the sum of values reported in 2C.18 in each year of the price control to date, with each year indexed to nominal prices.	N/a
2C.31	Cumulative allowed expenditure to reporting year end	Cumulative retail expenditure allowed in the PR19 FD for the period 2020-25 to reporting year end. This is calculated as: $\frac{Reporting year}{2020-21} A * B$ A is the 'Cost to serve per customer - £/ connected household' specified in PR19 final determination model 'Feeder	N/a
		model 4: Retail cost allowances' in each year to date, indexed to nominal prices. <i>B</i> is actual customer numbers reported in 2F.7 in each year of the price control to date.	
2C.32	Total allowed expenditure 2020-25	Total retail expenditure allowed in the PR19 FD. In years up to 2024-25, this is calculated as: $\sum_{2020-21}^{Reporting year} A * B + \sum_{2024-25}^{2024-25} A * C$ Reporting year+1	N/a
		In 2024-25, this is calculated as: $\sum_{2024-25}^{2024-25} A * B$ A is the 'Cost to serve per customer - £/ connected household' specified in PR19 final determination model 'Feeder model 4: Retail cost allowances' in each year to date, indexed to nominal prices. <i>B</i> is actual customer numbers reported in 2F.7 in each year of the price control to date. <i>C</i> is reforecast customer numbers equivalent to those reported in 2F.8 in years remaining in the price control.	

Pro forma 2D: Historic cost analysis of tangible fixed assets - by price control

2.3 When populating the split between principal assets and third-party assets for depreciation, companies should note that this distinction need only be made for assets dedicated to third party service activities. Depreciation on assets used for both principal and third-party activities does not need to be allocated and should be recorded as principal services.

Line	Title	Definition
2D.1	At 1 April 20xx	The historical cost value of the assets brought forward from the previous year.
2D.2	Disposals	The reduction in value of assets caused by disposal of assets, by type.
2D.3	Additions	Increase in value of assets by type caused by purchase.
2D.4	Adjustments	Any adjustments to the 'cost' value, this will include revaluations.
2D.5	Assets adopted at nil cost	The fair value of any adopted assets
2D.6	At 31 March 20xx	This is the historical cost value at the end of the year. The sum of lines 2D.1 to 2D.5.
2D.7	At 1 April 20xx	Accumulated depreciation brought forward on assets by type at the beginning of the year. This should be entered as a negative number.
2D.8	Disposals	The reduction in accumulated depreciation caused by disposal of assets by type. Enter as a positive.
2D.9	Adjustments	Any adjustments to the accumulated depreciation value, this will include the impact of any impairments.
2D.10	Charge for the year	Depreciation charge. Enter as a negative.
2D.11	At 31 March 20xx	Accumulated depreciation carried forward by asset type at the end of the charging year. The sum of lines 2D.7 to 2D.10.
2D.12	Net book amount at 31 March 20xx	Net book value by asset type at the year end. The sum of lines 2D.6 and 2D.11.
2D.13	Net book amount at 1 April 20xx	Net book value by asset type at the beginning of the year. The sum of lines 2D.1 and 2D.7.
2D.14	Principal services	Depreciation charge on assets used to deliver 'principal services' as set out in appendix 1. Enter as a negative.
2D.15	Third party services	Depreciation charge on assets used to deliver 'third party services' as set out in appendix 1. Enter as a negative.
2D.16	Total	Total depreciation charge (sum of lines 14 and 15) which will agree to line 2D.10.

Pro forma 2E: Analysis of 'grants and contributions' for the 12 months ended 31 March 20xx – water resources, water network plus and wastewater network plus

2.4 For this table where the term 'capitalised' is used, this refers to a contribution which is initially recognised on the statement of financial position before being amortised over multiple accounting periods in the income statement.

Line	Title	Definition
2E.1	Diversions – s185	Contributions received in relation to the alteration or removal of any relevant pipe (as defined in section 158 of the Water Industry Act 1991) or other apparatus that the Appointee is required to carry out under section 185 of the Water Industry Act 1991.
2E.2	Other contributions (price control)	Other contributions received from organisations towards the construction of water specific capital projects which were included in the price control.
2E.3	Price control grants and contributions	The sum of lines 2E.1 to 2E.2.
2E.4	Diversions - NRSWA	Contributions received in relation to the alteration or removal of any relevant pipe (as defined in section 158 of the Water Industry Act 1991) or other apparatus that the Appointee is required to carry out under the New Roads and Streets Works Act 1991.
2E.5	Diversions – other non-price control	Contributions received in relation to the alteration or removal of any relevant pipe (as defined in section 158 of the Water Industry Act 1991) or other apparatus that the Appointee is required to carry out under a statutory provision except a provision of the Water Industry Act 1991 or a provision of the New Roads and Streets Works Act 1991.
2E.6	Other contributions (non-price control)	Other contributions received from organisations towards the construction of water specific capital projects which were not included in the price control.
2E.7	Total grants and contributions	The sum of lines 2E.3 to 2E.6.
2E.8	Value of adopted assets	The fair value of any adopted water resource assets.
2E.9	Connection charges	Contributions received from developer for service connection charges for installing a new service pipe and meter.
2E.10	Infrastructure charge receipts – new connections	Infrastructure charges received in the year for new connections. This reflects a contribution to the costs of enhancing the local water network. This includes infrastructure charges collected by NAVs and passed through to incumbents.
2E.11	Requisitioned mains	Contributions received from developers to requisition a new water main
2E.12	Diversions – s185	Contributions received in relation to the alteration or removal of any relevant pipe (as defined in section 158 of the Water Industry Act 1991) or other apparatus that the Appointee is required to carry out under section 185 of the Water Industry Act 1991.
2E.13	Other contributions (price control)	Other contributions received from organisations towards the construction of water specific capital projects which were included in the price control.

Line	Title	Definition
2E.14	Price control grants and contributions before the deduction of income offset	The sum of lines 2E.9 to 2E.13.
2E.15	Income offset	Income offset discounts applied to grants and contributions for water network plus. Should be entered as a positive number.
2E.16	Price control grants and contributions after the deduction of income offset	Line 2E.14 minus line 2E.15.
2E.17	Diversions - NRSWA	Contributions received in relation to the alteration or removal of any relevant pipe (as defined in section 158 of the Water Industry Act 1991) or other apparatus that the Appointee is required to carry out under the New Roads and Streets Works Act 1991.
2E.18	Diversions – other non-price control	Contributions received in relation to the alteration or removal of any relevant pipe (as defined in section 158 of the Water Industry Act 1991) or other apparatus that the Appointee is required to carry out under a statutory provision except a provision of the Water Industry Act 1991 or a provision of the New Roads and Streets Works Act 1991.
2E.19	Other contributions (non-price control)	Other contributions received from organisations towards the construction of water specific capital projects which were not included in the price control.
2E.20	Total grants and contributions	The sum of lines 2E.16 to 2E.19.
2E.21	Value of adopted assets	The fair value of any adopted water network plus assets
2E.22	Receipts for on-site work	Contributions received from developers for on-site work. This includes contributions received to requisition a new sewer.
2E.23	Infrastructure charge receipts – new connections	Infrastructure charges received in the year for new connections. This reflects a contribution to the costs of enhancing the local sewerage network. This includes infrastructure charges collected by NAVs and passed through to incumbents.
2E.24	Diversions – s185	Contributions received in relation to the alteration or removal of any relevant pipe (as defined in section 158 of the Water Industry Act 1991) or other apparatus that the Appointee is required to carry out under section 185 of the Water Industry Act 1991.
2E.25	Other contributions (price control)	Other contributions received from organisations towards the construction of specific wastewater capital projects which were included in the price control. This also includes contributions received from developers for connection to a public sewer and 'inspection and supervision fees' (2.5% of construction costs based on WRC 'Sewers for adoption'.
2E.26	Price control grants and contributions before the deduction of income offset	The sum of lines 2E.22 to 2E.25.
2E.27	Income offset	Income offset discounts applied to grants and contributions for wastewater network plus. Should be entered as a positive number.

Line	Title	Definition
2E.28	Price control grants and contributions after the deduction of income offset	Line 2E.26 minus line 2E.27.
2E.29	Diversions - NRSWA	Contributions received in relation to the alteration or removal of any relevant pipe (as defined in section 158 of the Water Industry Act 1991) or other apparatus that the Appointee is required to carry out under the New Roads and Streets Works Act 1991.
2E.30	Diversions – other non-price control	Contributions received in relation to the alteration or removal of any relevant pipe (as defined in section 158 of the Water Industry Act 1991) or other apparatus that the Appointee is required to carry out under a statutory provision except a provision of the Water Industry Act 1991 or a provision of the New Roads and Streets Works Act 1991.
2E.31	Other contributions (non-price control)	Other contributions received from organisations towards the construction of specific wastewater capital projects which were not included in the price control.
2E.32	Total grants and contributions	The sum of lines 2E.28 to 2E.31.
2E.33	Value of adopted assets	The fair value of any adopted wastewater network plus assets.
2E.34	Brought forward	Total value of capitalised grants and contributions brought forward as at 1 April.
2E.35	Capitalised in year	Total value of grants and contributions capitalised in the year. Water resources, copied from 2E.7 column 2 Water N+, copied from 2E.20 column 2 Wastewater N+, copied from 2E.32 column 2
2E.36	Amortisation (in income statement)	Total value of amortisation released to the income statement in the year. Input as a negative number.
2E.37	Carried forward	Total value of capitalised grants and contributions carried forward as at 31 March. This should represent the wholesale element of 1C.26. The sum of lines 2E.34 to 2E.36.

Pro forma 2F: Residential retail

Line	Title	Definition
2F.1	Wholesale revenue	The wholesale element of residential charges. Copied from 21.16.
2F.2	Retail revenue	The retail element of residential charges. Copied from 2I.20.
2F.3	Total residential revenue	Total residential charges. The sum of 2F.1 and 2F.2.
2F.4	Revenue Recovered ("RR")	This is the same as line 2F.2.
2F.5	Revenue sacrifice	Revenue sacrifice reflecting the revenue voluntarily foregone. This is equivalent to line 6 of the inputs block in the PR19 Reconciliation Rulebook.
2F.6	Actual revenue (net)	The sum of 2F.4 and 2F.5. This is equivalent to line 6 of the calculations block in the PR19 Reconciliation Rulebook.

Line	Title	Definition
2F.7	Actual customers ("AC")	This is equivalent to line 2 of the inputs block in the PR19 Reconciliation Rulebook and is equal to 'Total Residential Customers' (4R.4).
2F.8	Reforecast customers	This is equivalent to line 4 of the inputs block in the PR19 Reconciliation Rulebook. Note that number is the new customer number forecasts for the ongoing Charging Year at the time of its APR submission.
2F.9	Allowed revenue ("R")	This is equivalent to line 4 of the calculations block in the PR19 Reconciliation Rulebook.
2F.10	Net adjustment	This is 2F.9 minus 2F.6. This is equivalent to line 7 of the calculations block in the PR19 Reconciliation Rulebook.
2F.11	Average household retail revenue per customer	This is 2F.6 divided by 2F.7 x 1000.

Pro forma 2G: Non-household water - revenues by tariff type

2.5 This table should only be completed by Welsh companies.

Line	Title	Definition
2G.1	Tariff type 1	Total revenue received from non-household tariff type 1 (customer group 1)
2G.2	Tariff type 2	Total revenue received from non-household tariff type 2(customer group 1)
2G.3	Total default tariffs customer group 1	Total revenue received from all non-household group 1 customers on a default tariff.
2G.4	Tariff type 1	Total revenue received from non-household tariff type 2(customer group 2)
2G.5	Total default tariffs	Total revenue received from all non-household customers on a default tariff.
2G.6	Total non-default tariffs	Total revenue received from all customers on a non- default tariff.
2G.7	Total	Total revenue received from all default and non-default tariffs.
2G.8	Total	Total revenue received from all default and non-default tariffs. Some customers will be receiving multiple services under different tariffs, e.g. for services at multiple sites falling into different tariff bandings. Therefore the total number of 'customers' may be lower than the number of connections shown in the tariff analysis.

Column	Definition
1	The total of column 1 should be equal to the sum of lines 21.1& 21.2.
2	
3	total of columns 1 and 2

Column	Definition
4	The number of connections reported should be the average number of properties billed (excluding void properties) in the year, calculated at least on a monthly basis. Should be recorded in '000s with 3 decimal places. For the customer analysis the number of customers reported in column 4 should be equivalent to that in the tariff analysis.
5	Calculated by dividing column 2 by column 4. Nearest £1.

Pro forma 2H: Non-household wastewater – revenues by tariff type

Line	Title	Definition
2H.1	Tariff type 1	Total revenue received from non-household tariff type 1 (customer group 1)
2H.2	Tariff type 2	Total revenue received from non-household tariff type 2(customer group 1)
2H.3	Tariff type 3	Total revenue received from non-household tariff type 3(customer group 1)
2H.4	Total default tariffs	Total revenue received from all non-household group 1 customers on a default tariff.
2H.5	Total non-default tariffs	Total revenue received from all customers on a non- default tariff.
2H.6	Total	Total revenue received from all default and non-default tariffs.
2H.7	Total	Total revenue received from all default and non-default tariffs. Some customers will be receiving multiple services under different tariffs, e.g. for services at multiple sites falling into different tariff bandings. Therefore the total number of 'customers' may be lower than the number of connections shown in the tariff analysis.

2.6 This table should only be completed by Welsh companies.

Column	Definition
1	The total of column 1 should be equal to the sum of lines 21.5-21.10.
2	
3	total of columns 1 and 2
4	The number of connections reported should be the average number of properties billed (excluding void properties) in the year, calculated at least on a monthly basis. Should be recorded in '000s with 3 decimal places. For the customer analysis the number of customers reported in column 4 should be equivalent to that in the tariff analysis.
5	Calculated by dividing column 2 by column 4. Nearest £1.

Pro forma 2I: Revenue analysis & wholesale control reconciliation for the 12 months ended 31 March 20xx

Line	Title	Definition
21.1	Unmeasured	Total revenue from wholesale water charges, other than on a measured basis. This should be split between household and non- household connections. This should include revenue from large users and special agreements.
21.2	Measured	Total revenue from wholesale water charges, where all or some of the charges are based on measured quantities of volume. This should be split between household and non- household connections. This should include revenue from large users and special agreements.
21.3	Third party revenue	Third party revenue covered by the wholesale water price control, e.g., supplies of non-potable water to customers.
21.4	Total	Total revenue from wholesale water charges. The sum of 2I.1 to 2I.3.
21.5	Unmeasured – foul charges	Total revenue from wholesale wastewater foul charges, other than on a measured basis. This should be split between household and non-household connections. This should include revenue from large users and special agreements.
21.6	Unmeasured – surface water charges	Total revenue from wholesale wastewater surface water charges, other than on a measured basis. This should be split between household and non-household connections. This should include revenue from large users and special agreements.
21.7	Unmeasured – highway drainage charges	Total revenue from wholesale wastewater highway drainage charges, other than on a measured basis. This should be split between household and non-household connections. This should include revenue from large users and special agreements.
21.8	Measured – foul charges	Total revenue from wholesale wastewater foul charges, where all or some of the charges are based on measured quantities of volume. This should be split between household and non- household connections. This should include revenue from trade effluent, large users and special agreements.
21.9	Measured – surface water charges	Total revenue from wholesale wastewater surface water charges, where all or some of the charges are based on measured quantities of volume. This should be split between household and non-household connections. This should include revenue from trade effluent, large users and special agreements.
21.10	Measured – highway drainage charges	Total revenue from wholesale wastewater highway drainage charges, where all or some of the charges are based on measured quantities of volume. This should be split between household and non-household connections. This should include revenue from trade effluent, large users and special agreements.
21.11	Third party revenue	Third party revenue covered by the wholesale wastewater price control.
21.12	Total wholesale wastewater revenue	Total revenue from wholesale wastewater charges. The sum of 21.5 to 21.11.
21.13	Unmeasured	Total revenue from wholesale additional control charges, other than on a measured basis. This should be split between household and non-household connections. This should include revenue from large users and special agreements.

Line	Title	Definition
21.14	Measured	Total revenue from wholesale additional control charges, where all or some of the charges are based on measured quantities of volume. This should be split between household and non- household connections. This should include revenue from large users and special agreements.
21.15	Total	Total revenue from wholesale additional control charges. The sum of 21.13 to 21.14.
21.16	Wholesale Total	The sum of lines 21.4, 21.12 and 21.15.
21.17	Unmeasured	Total revenue from retail charges, other than on a measured basis. This should be split between household and non-household connections.
21.18	Measured	Total revenue from retail charges, where all or some of the charges are based on measured quantities of volume. This should be split between household and non- household connections.
21.19	Retail third party revenue	Any third-party revenue relating to retail activities.
21.20	Total	Total revenue from retail charges. The sum of 21.17 to 21.19.
21.21	Bulk supplies - water	Bulk supply charges received for providing a bulk supply (for potable or non-potable supplies) to another water undertaker.
21.22	Bulk supplies - wastewater	Bulk supply charges for providing wastewater connection agreements with another wastewater undertaker.
21.23	Other third-party revenue – non price control	All other sources of revenue received from third parties for which costs are not covered by the wholesale price control. E.g. rechargeable works where the appointee is a monopoly supplier and Excluded charges.
21.24	Other appointed revenue	All other sources of revenue that are not reported elsewhere in the table but are classed as appointed business. E.g. recreational use of protected land.
21.25	Total appointed revenue	The sum of lines 21.16, 21.20, 21.21, 21.22, 21.23 and 21.24. This should equal 1A.1 (appointed business activities column).

Pro forma 2J: Infrastructure network reinforcement costs for the 12 months ended 31 March 20xx

2.7 Expenditure in this table covers both above and below ground assets, ie both "infrastructure" and "non-infrastructure" as defined in chapter 14, for the provision or upgrading of network assets such as water mains, tanks, service reservoirs, to provide for new customers with no net deterioration of existing levels of service. This expenditure relates solely to network reinforcement works that are needed on the existing and new network assets beyond the nearest practicable point where the connection to the network has, or will been made.

Line	Title	Definition
2J.1	Distribution and trunk mains	Capital expenditure on new or upsized distribution and trunk mains as defined in 4N, excluding third party capex
2J.2	Pumping and storage facilities	Capital expenditure on new or upgrading of pumps and the installation of small service reservoirs or towers as defined in 4N and excluding third party capex
2J.3	Other	Any other capital expenditure defined in 4N but not included in 2J.1 and 2J.2
2J.4	Total	The sum of lines 2J.1 to 2J.3
2J.5	Foul and combined systems	Capital expenditure on new or upsized public foul and combined sewers defined in 40 and excluding third party capex
2J.6	Surface water only systems	Capital expenditure on new or upsized surface water only public sewers defined in 40 and excluding third party capex
2J.7	Pumping and storage facilities	Capital expenditure on construction of new booster stations and pumps and installation of storage tanks defined in 40 and excluding third party capex.
2J.8	Other	Any other capital expenditure defined in 40 but not included in 2J.5-2J.7.
2J.9	Total	The sum of lines 2J.5 to 2J.8

Pro forma 2K: Infrastructure charges reconciliation for the 12 months ended 31 March 20xx

Line	Title	Definition
2K.1	Infrastructure charges	Value of grants and contributions receivable, as recorded in table 2E, lines 2E.10 (water) and 2E.23 (wastewater) 'total' column.
2K.2	Discounts applied to infrastructure charges	The value of the discounts applied to infrastructure charges E.g. for developments where properties are fitted with water efficient fittings.
2K.3	Gross Infrastructure charges	Value of grants and contributions receivable before any discounts are applied. Calculated as the sum of 2K.1 and 2K.2.
2K.4	Variance brought forward	Variance reported in 2K.7 in the previous reporting year.
2K.5	Revenue	Water: Value derived above in 2K.1 (column 1) Wastewater: Value derived above in 2K.1 (column 2)
2K.6	Costs	Water: Equal to 2J.4 column 1 x (-1) Wastewater: Equal to 2J.9 column 1 x (-1)
2K.7	Variance carried forward	The sum of lines 2K.4 to 2K.6

Pro forma 2L: Analysis of land sales for the 12 months ended 31 March 20xx

Lii	ne	Title	Definition
2L.		•	The net proceeds, after the deduction of all offsetting costs from disposals of protected land, including those already subject to regulation through Condition K of the licence.

Pro forma 2M: Revenue reconciliation for the 12 months ended 31 March 20xx

Line	Title	Definition
2M.1	Wholesale revenue governed by price control	Wholesale revenue governed by price control. Water resources and water network+; copied from 2I.4 Wastewater network+ and bioresources; copied from 2I.12 Additional control; copied from 2I.15.
2M.2	Grants & contributions (price control)	Price control grants and contributions collected in year under the price control after the deduction of income offset. Equal to the sum of lines 2E.3, 2E.16 and 2E.28.
2M.3	Total revenue governed by wholesale price control	Total revenue governed by wholesale price control. Sum of 2M.1 and 2M.2.
2M.4	Allowed wholesale revenue before adjustments (or modified by CMA)	For water resources, water network plus and wastewater network plus - This, together with grants and contributions in line 5, is equivalent to 'Allowed revenue' in line 2 of the calculations block in the PR19 Reconciliation Rulebook. Unless modified by the CMA, it is the company's allowed revenue as set out in the 'Notification of the PR19 final determination of Price Controls' in the first charging year. For bioresources - This is equivalent to the 'Modified Revenue' set out in line 3 of the calculations block in the PR19 Reconciliation Rulebook. Consistent with the PR19 Reconciliation Rulebook, for all wholesale controls this should reflect any in-period ODI determinations.
2M.5	Allowed grants & contributions before adjustments (or modified by CMA)	Grants and contributions (price control) as calculated by the grants and contributions feeder model.
2M.6	Revenue adjustment	For water resources, water network plus and wastewater network plus - This is equivalent to 'RFI' line 27 of the calculation block in the PR19 Reconciliation Rulebook. For bioresources - This is equivalent to minus 'Bioresources revenue adjustment (ABR) - with financing adjustment & 2 year lag of inflation' in line 7 of the calculations block in the PR19 Reconciliation Rulebook.

Line	Title	Definition
2M.7	Other adjustments	For water resources, water network plus and wastewater network plus - This is equivalent to the 'blind year adjustment inc. financing rate and inflation adjustment (BYA)' in line 8 of the calculation block in the PR19 Reconciliation Rulebook. For water resources, it would also include 'Bilateral entry adjustment - as incurred' in line 5 of the calculations block in the PR19 Reconciliation Rulebook for relevant companies. For bioresources - This is equivalent to minus 'Profit from bioresources trading - with 2 year lag of inflation' in line 8 of the bioresources calculation block in the PR19 Reconciliation Rulebook.
2M.8	Revenue cap	Equal to the sum of lines 4-7. For water resources, water network plus and wastewater network plus - This is equivalent to the 'Adjusted Allowed Revenue (AR)' in line 9 in the calculation block of the PR19 Reconciliation Rulebook. For bioresources - This is equivalent to the 'Allowed revenue' in line 4 of the calculations block in the PR19 Reconciliation Rulebook.
2M.9	Revenue cap	Equal to line 8.
2M.10	Revenue recovered	Equal to line 3. For water resources, water network plus and wastewater network plus - This is equivalent to the 'Actual revenue (RR)' in line 9 of the Inputs block in the PR19 reconciliation rulebook. For bioresources - This is equivalent to 'Recovered revenue for bioresources (RR)' in line 4 of the inputs block in the PR19 Reconciliation Rulebook.
2M.11	Revenue imbalance	For water resources, water network plus and wastewater network plus - This is equivalent to the 'Revenue Imbalance' in line 10 of the calculations block in the PR19 Reconciliation Rulebook. For bioresources - This is the 'Revenue imbalance' in line 5 of the calculations block in the PR19 Reconciliation Rulebook.

Pro forma 2N: Residential retail – social tariffs

2.8 All the information provided in this table should be in relation to social tariffs as set out under section 44 of the Flood and Water Management Act 2010 and matters covered by the statutory guidance.

Line	Title	Definition
2N.1	Residential water only social tariffs customers	Average number of residential water only customers on social tariffs during the year
2N.2	Residential wastewater only social tariffs customers	Average number of residential wastewater only customers on social tariffs in the year
2N.3	Residential dual service social tariffs customers	Average number of residential dual (water and wastewater) customers on social tariffs in the year
2N.4	Residential water only no social tariffs customers	Average number of residential water only customers NOT on social tariffs during the year

Line	Title	Definition
2N.5	Residential wastewater only no social tariffs customers	Average number of residential wastewater only customers NOT on social tariffs in the year
2N.6	Residential dual service no social tariffs customers	Average number of residential dual (water and wastewater) customers NOT on social tariffs in the year
2N.7	Average discount per water only social tariffs customer	(2N.10 + 2N.16) divided by 2N.1
2N.8	Average discount per wastewater only social tariffs customer	(2N.11 + 2N.17) divided by 2N.2
2N.9	Average discount per dual service social tariffs customer	(2N.12 + 2N.18) divided by 2N.3
2N.10	Total customer funded cross-subsidies for water only social tariffs customers	Total discount paid to water only social tariffs customers funded through residential water only customer subsidies in the year
2N.11	Total customer funded cross-subsidies for wastewater only social tariffs customers	Total discount paid to wastewater only social tariffs customers funded through residential water only customer subsidies in the year
2N.12	Total customer funded cross-subsidies for dual service social tariffs customers	Total discount paid to dual (water and wastewater) social tariffs customers funded through residential dual (water and wastewater) customer subsidies in the year
2N.13	Average customer funded cross-subsidy per water only social tariffs customer	2N.10 divided by (2N.1 + 2N.4)
2N.14	Average customer funded cross-subsidy per wastewater only social tariffs customer	2N.11 divided by (2N.2 + 2N.5)
2N.15	Average customer funded cross-subsidy per dual service social tariffs customer	2N.12 divided by (2N.3 + 2N.6)
2N.16	Total revenue forgone by company to fund cross-subsidies for water only social tariffs customers	Total amount of revenue forgone by company to fund social tariff discounts for water only customers in the year
2N.17	Total revenue forgone by company to fund cross-subsidies for wastewater only social tariffs customers	Total amount of revenue forgone by company to fund social tariff discounts for wastewater only customers in the year
2N.18	Total revenue forgone by company to fund cross-subsidies for dual service social tariffs customers	Total amount of revenue forgone by company to fund social tariff discounts for dual (water and wastewater) customers in the year
2N.19	Average revenue forgone by company to fund cross-subsidy per water only social tariffs customer	2N.16 divided by 2N.1
2N.20	Average revenue forgone by company to fund cross-subsidy per wastewater only social tariffs customer	2N.17 divided by 2N.2
2N.21	Average revenue forgone by company to fund cross-subsidy per dual service social tariffs customer	2N.18 divided by 2N.3

Line	Title	Definition
2N.22	Level of support for social tariff customers reflected in business plan	Maximum contribution to social tariff by residential retail customers as agreed in PR19 customer engagement. This amount should be informed by the Willingness to Pay research carried out to support PR19 customer engagement.
2N.23	Maximum contribution to social tariffs supported by customer engagement	Willingness to pay amount derived from PR19 customer engagement. It could be the same as 2N.22 if the full Willingness to Pay amount was reflected in business plan.

Pro forma 20: Historic cost analysis of intangible fixed assets - by price control

2.9 When populating the split between principal assets and third party assets for amortisation, companies should note that this distinction need only be made for assets dedicated to third party service activities. Amortisation on assets used for both principal and third party activities does not need to be allocated and should be recorded as principal services.

Line	Title	Definition
20.1	At 1 April 20xx	The historical cost value of the assets brought forward from the previous year.
20.2	Disposals	The reduction in value of assets caused by disposal of assets, by type.
20.3	Additions	Increase in value of assets by type caused by purchase.
20.4	Adjustments	Any adjustments to the 'cost' value, this will include revaluations.
20.5	Assets adopted at nil cost	The fair value of any adopted assets
20.6	At 31 March 20xx	This is the historical cost value at the end of the year. The sum of lines 20.1 to 20.5.
20.7	At 1 April 20xx	Accumulated amortisation brought forward on assets by type at the beginning of the year. This should be entered as a negative number.
20.8	Disposals	The reduction in accumulated amortisation caused by disposal of assets by type. Enter as a positive.
20.9	Adjustments	Any adjustments to the accumulated amortisation value, this will include the impact of any impairments.
20.10	Charge for the year	Amortisation charge. Enter as a negative.
20.11	At 31 March 20xx	Accumulated amortisation carried forward by asset type at the end of the charging year. The sum of lines 20.7 to 20.10.
20.12	Net book amount at 31 March 20xx	Net book value by asset type at the year end. The sum of lines 20.6 and 20.11.
20.13	Net book amount at 1 April 20xx	Net book value by asset type at the beginning of the year. The sum of lines 20.1 and 20.7.

Line	Title	Definition
20.14	Principal services	Amortisation charge on assets used to deliver 'principal services' as set out in appendix 1. Enter as a negative.
20.15	Third party services	Amortisation charge on assets used to deliver 'third party services' as set out in appendix 1. Enter as a negative.
20.16	Total	Total amortisation charge (sum of lines 14 and 15) which will agree to line 20.10.

3. Definitions of terms; tables 3A-3I (Performance summary)

Pro forma 3A: Water performance commitments (financial) and Pro forma 3B: Wastewater performance commitments (financial)

Price base

- 3.1 Within the PR19 final determinations: company specific outcome performance commitment appendices <u>https://www.ofwat.gov.uk/regulated-companies/price-review/2019-price-review/final-determinations/</u> the performance commitment and outcome delivery incentive monetary values, including incentive rates, are in 2017-18 prices. It is company's responsibility to report accurate and complete information for overall and individual performance commitments as specified in the company specific outcome performance commitment appendix.
- 3.2 For the five year 2020-25 period, the outcome delivery incentive monetary amounts in tables 3A and 3B (and other tables in section 3) should be in 2017-18 prices, not in report year prices.
- 3.3 This includes the 31 March 2025 forecasts for total 2020–25 period outperformance payment or underperformance payment.
- 3.4 It is for companies to decide how best to communicate their performance to customers, customer challenge groups (CCGs) and other stakeholders, but this should take account of the plans companies set out in their PR19 business plans.
- 3.5 For in-period outcome delivery incentives, companies should include a detailed note in their regulatory accounts to reconcile the value of any provision they declare in the financial statements in respect of underperformance payments or outperformance payments that will be payable in the next charging year with the APR tables 3A and 3B 2017-18 price term values.

When will indexation take place?

3.6 The outcome delivery incentives monetary values will be indexed immediately prior to their application. That is, financial outperformance payments and underperformance payments will need to be translated to future year prices at the time of payment to/by the company:

For in-period outcome delivery incentives (adjustment to in-period revenue) indexation will take place as part of the determination process. For outcome delivery incentives that will be applied at a future price review determination indexation will take place as part of the price review reconciliation process.

Column	Title	Definition
1	Unique reference	Unique reference generated for the performance commitment as reported in the company's Outcome performance commitment appendix. For example: PR19AFW_W-A1 (pre-populated data)
2	Unit	Unit that the performance commitment is measured in as described in its definition (pre-populated data)
2a	Decimal places	Number of decimal places required (pre-populated data).
3		(Not used)
4	Performance level – actual	Actual performance for the current reporting year in the units the performance commitment is measured in. For example, if the performance commitment is measured in Ml/day and the actual performance level is 124.5 Ml/day, then enter 124.5. This applies to all performance commitments, including those with non-financial incentives and those where a performance commitment level (PCL) has not been set for the current reporting year.
5	Performance commitment level met?	If the performance commitment level for the current reporting year has been met select 'Yes', where it has not been met select 'No'. If a performance commitment level has not been set for the current reporting year select "-" (hyphen). Overall performance in terms of the percentages of performance commitments achieved, is automatically calculated for tables 3a, 3B and 3E.
6	Outperformance or underperformance payment	This column applies only to performance commitments which have outcome delivery incentives that are payable within 2020-25 rather than at the end of 2020-25 period The outperformance payment or underperformance payment earned in the current reporting year will be automatically calculated in the embedded ODI reconciliation model and copied into tables 3A and 3B for each financial performance commitment where appropriate Outperformance payments are shown as a positive number and underperformance payments as a negative number. Where no outperformance payment or underperformance payment has been earned, the value will be shown as zero. Note: this is the outperformance payment or underperformance payment for the current reporting year, not the cumulative value.

Column	Title	Definition
7	Forecast of total 2020-25 outperformance or underperformance payment	This column applies to all financial outcome delivery incentives that are payable within 2020-25 and outcome delivery incentives that are payable at the end of 2020-25 period). A forecast of the overall outperformance payment or underperformance payment paid/ accrued by the end of 2020-25 period (31 March 2025) based on your current performance and your current expectation of your future performance. The forecast should include any outperformance payment and/or underperformance payment already earned (either in previous reporting years or the current reporting year), plus forecasts for the remaining years of the 2020-25 period.
		underperformance payments as a negative number.

3.7 Current year reporting for lines 3A.2 – 3A.6 is copied from table 3F. Current year reporting for lines 3B.1 – 3B.3 is copied from table 3G.

Pro forma 3C: C-MeX

Line	Title	Definition	
3C.1	Annual customer satisfaction score for the customer service survey	Results of the customer service survey as provided by Ofwat's survey agent for the current reporting year (two decimal places).	
3C.2	Annual customer satisfaction score for the customer experience survey	Results of the customer experience survey as provided by Ofwat's survey agent for the current reporting year (two decimal places).	
3C.3	Annual C-MeX score	Overall C-MeX score for the current reporting year (two decimal places) in line with the company's outcomes performance commitment appendix where 3C.1 is weighted 50% and 3C.2 is weighted 50% of the overall score.	
3C.4	Annual net promoter score	The company's net promoter score (NPS) for the current reporting year (two decimal places) where the results from the customer service survey and customer experience survey are weighted equally and no other weightings are applied.	
3C.5	Total household complaints	Total household complaints as reported to CCWater for the current reporting year.	
3C.6	Total connected household properties	Total connected household properties as at 31 March of the current reporting year (zero decimal places). To avoid double counting this should be the sum of water-only, wastewater-only and dual-service properties.	
3C.7	Total household complaints per 10,000 connections	3C.5 multiplied by (10,000 divided by 3C.6) to three decimal places	
3C.8	Confirmation of communication channels offered	In line with the outcomes performance commitment appendix for each company, confirmation that the requisite number of communication channels have been offered throughout the current reporting year (true or false).	

Pro forma 3D: D-MeX

Line	Title	Definition
3D.1	Qualitative component annual results	Results of the qualitative survey for the current reporting year (two decimal places).
3D.2	Quantitative component annual results	Results of the quantitative metrics in line with the company's outcomes performance commitment appendix for the current reporting year (two decimal places). Equal to 3D.8 multiplied by 100.
3D.3	D-MeX score	Overall D-MeX score for the current reporting year (two decimal places) in line with the company's outcomes performance commitment appendix where 3D.1 is weighted 50% and 3D.2 is weighted 50% of the overall score.
3D.4	Developer services revenue (water)	The sum of lines 2E.1, 2E.2, 2E.9, 2E.11, 2E.12, 2E.13 and 2K.3 (gross of any discounts or income offsets) in £m to three decimal places.
3D.5	Developer services revenue (wastewater)	The sum of lines 2E.22, 2E.24, 2E.25 and 2K.3 (gross of any discounts or income offsets) in £m to three decimal places.
3D.W1 to 3D.W50	Water UK performance metrics	For each performance metric that applies in the relevant reporting period, a percentage is reported in line with the company's outcomes performance commitment appendix.
3D.7	D-MeX quantitative score	For the reporting period, an average of the percentages reported in lines 3D.W1 to 3D.W50.
3D.8	D-MeX quantitative score (annual)	For the reporting period, 3D.7 expressed as a number.

Pro forma 3E: Outcome performance – non financial performance commitments

Line	Title	Definition
3E.1	Risk of severe restrictions in a drought	
3E.2	Priority services for customers in vulnerable circumstances - PSR reach	Current year reporting is copied from table 3F.9 column 25 multiplied by 100
3E.3	Priority services for customers in vulnerable circumstances - Attempted contacts	Current year reporting is copied from table 3F.9 column 27 multiplied by 100
3E.4	Priority services for customers in vulnerable circumstances - Actual contacts	Current year reporting is copied from table 3F.9 column 29 multiplied by 100
3E.5	Risk of sewer flooding in a storm	
3E.6- 3E.28	Bespoke PCs	
3E.29	Non-financial performance commitments achieved	

Pro forma 3F: Underlying calculations for common performance commitments - water and retail

Line	Title	Column 3	Column 4	Column 5
3F.1	Mains repairs - Reactive	Copied from 3F.3	The total number of reactive mains repairs carried out in the reporting year.	(Column 4 divided by column 3) multiplied by 1000
3F.2	Mains repairs - Proactive	Copied from 3F.3	The total number of proactive mains repairs carried out in the reporting year.	(Column 4 divided by column 3) multiplied by 1000
3F.3	Mains repairs	Copied from 6C.1	Sum of 3F.1 and 3F.2	(Column 4 divided by column 3) multiplied by 1000
3F.4	Per capita consumption (PCC)	Total household population served for water excluding business.	The sum of post MLE measured and post MLE unmeasured household consumption in the reporting year in ML per day.	(Column 4 divided by column 3) multiplied by 1000) rounded to one decimal place

3.8 Leakage and PCC reported in previous years should be input into lines 3F.5 and 3F.6 to one decimal place.

Line	Title	Column 10	Column 11b	Column 12	Column 13
3F.5	Leakage	Average of columns 7-9 rounded to one decimal place.	Copied from 6B.35	Average of current and two preceding years; Average of columns 11, 11a and 11b rounded to one decimal place.	Calculated as (1- Column 12 divided by Column 10) multiplied by 100
3F.6	Per capita consumption (PCC)	Average of columns 7-9 rounded to one decimal place.	Copied from 3F.4 column 5	Average of current and two preceding years; Average of columns 11, 11a and 11b rounded to one decimal place.	Calculated as (1- Column 12 divided by Column 10) multiplied by 100

3.9 Columns 11c and 11d included as placeholders to capture future annual performance for lines 3F.5 and 3F.6

Line	Title	Column 16	Column 17	Column 18	Column 19
3F.7	Water supply interruptions		The total minutes lost for supply interruptions of \geq 3 hours.	properties whose supply was	Calculated as Column 17 divided by (column 16 multiplied by 1000)

Line	Title	Column 22
3 F.8	Unplanned outage	Calculated as Column 21 divided by Column 20

Line	Title	Column 23	Column 25	Column 28	Column 30
3F.9	Priority services for customers in vulnerable circumstances	Total number of residential properties billed for water (4R.19 total column) and/or wastewater services within the supply area at the end of the report year. Excludes void properties.	Calculated as Column 24 divided by (Column 23 multiplied by 1000)	Calculated as Column 27 divided by Column 22	Calculated as Column 29 divided by Column 26

Pro forma 3G: Underlying calculations for common performance commitments - wastewater

Line	Title	Column 4	Column 5	Column 6
3G.1	Internal sewer flooding - customer proactively reported	Copied from 3G.3	The total number of internal sewer flooding incidents proactively reported by customers.	(Column 5 divided by (column 4 multiplied by 1000)) multiplied by 10000
3G.2	Internal sewer flooding - company reactively identified (ie neighbouring properties)	Copied from 3G.3	The total number of internal sewer flooding incidents reactively identified by the company.	(Column 5 divided by (column 4 multiplied by 1000)) multiplied by 10000
3G.3	Internal sewer flooding	Copied from 4R.16 for wastewater	Sum of 3G.1 and 3G.2	(Column 5 divided by (column 4 multiplied by 1000)) multiplied by 10000
3G.4	Pollution incidents	Total length of sewer in km for the calendar year as stated in the version of the Environment Agency's Environmental performance assessment methodology specified in companies' PR19 outcomes performance commitment appendices.	The total number of pollution incidents as defined in companies' PR19 final determination outcomes performance commitments appendices.	Column 5 divided by column 4 multiplied by 10000

Line	Title	Column 4	Column 5	Column 6
3G.5	Sewer collapses	Sum of 7C.21 and 7C.22	The total number of sewer collapses as defined in companies' PR19 final determination outcomes performance commitments appendices.	Column 5 divided by column 4 multiplied by 1000

Pro forma 3H: Summary information on outcome delivery incentive payments

Line	Title	Definition
3H.1	Water resources	
3H.2	Water network plus	
3H.3	Wastewater network plus	Initial calculation of the in-period revenue performance
3H.4	Bioresources (sludge)	payments (excluding CMEX and DMEX) by price control. Automatically calculated in 2017-18 prices and copied from
3H.5	Residential retail	the embedded PR19 ODI performance model.
3H.6	Business retail	
3H.7	Dummy control	
3H.8	Water resources	
3H.9	Water network plus	
3H.10	Wastewater network plus	Initial calculation of the end of period revenue performance
3H.11	Bioresources (sludge)	payments (excluding CMEX and DMEX) by price control. Automatically calculated in 2017-18 prices and copied from
3H.12	Residential retail	the embedded PR19 ODI performance model.
3H.13	Business retail	
3H.14	Dummy control	
3H.15	Water resources	
3H.16	Water network plus	
3H.17	Wastewater network plus	Initial calculation of the end of period RCV performance
3H.18	Bioresources (sludge)	payments (excluding CMEX and DMEX) by price control. Automatically calculated in 2017-18 prices and copied from
3H.19	Residential retail	the embedded PR19 ODI performance model.
3H.20	Business retail	
3H.21	Dummy control	

Pro forma 3I: Supplementary outcomes information

Line	Title	Column 3
31.1	Planned outage	Calculated as column 2 divided by column 1

Line	Title	Column
31.2	Risk of severe restrictions in a drought	

Line	Title	Column 12	Column 14	Column 16
31.3	Risk of sewer flooding in a storm	Column 11 divided by column 10	Column 13 divided by column 10	Column 15 divided by column 10

Population equivalent served figures in columns 10, 11, 13 and 15 should be input to 0 decimal places.

Line	Title	Definition
31.4	Sewer collapses	Number of patch repairs or relining undertaken on sewer and not included in reported sewer collapses.

4. Definitions of terms; tables 4A-4U (Additional regulatory information – service level)

Pro forma 4A: Bulk supply information for the 12 months ended 31 March 20xx

Line	Title	Definition
4A.1- 4A.25	Bulk supply xx	Value of bulk supply revenue and MI supplied. The description for each bulk supply should match that used on the bulk supply register.
4A.26	Total bulk supply exports	Sum of lines 1 to 25.
4A.27- 4A.51	Bulk supply xx	Value of bulk supply costs and MI supplied. The description for each bulk supply should match that used on the bulk supply register.
4A.52	Total bulk supply imports	Sum of lines 27 to 51.

Pro forma 4B: Analysis of debt

- RAG3 confirms that this table is not required to be published within the Annual Performance Report, however the data within this table must be consistent with the borrowings and interest cost figures featuring in table 1E ('Net debt analysis').
 Where this is not the case, companies should explain why and provide a reconciliation to explain variance against table 1E.
- 4.2 Companies should provide information for instruments which are outstanding as at the 31 March end of the reporting year, and any forward-starting instruments which have been arranged prior to this point.
- 4.3 Companies should report all instruments relevant to the regulated company, even where this has been taken out by an associate or financing subsidiary. Companies should report instruments in the appropriate blocks according to the behaviour of the cashflows associated with that instrument:

fixed rate (block A); floating rate (block B) RPI-linked (block C) CPI-linked (block D).

Column	Title	Definition
1	Instrument	Descriptive summary text.
2	Issuer	The water company counterparty for the instrument, e.g. 'Yorkshire Water Services Bradford Finance Ltd.'
3	Category	Entry should choose from the following options: Bond, Debenture, Debenture stock or irredeemable, EIB loan, Finance lease, Intercompany loan, Loan (non-EIB), Liquidity facility, Overdraft, Preference shares, Private placement, RCF, Swap - paying leg, Swap - receiving leg, Other. If choosing 'Other', the type of instrument should be explained in Column 30 ('Further information')
4	Maturity type	Entry should choose from the following options: Bullet, Amortising, Callable, Sinkable, Perpetual, Revolving, Other. If choosing 'Other', the maturity type of the instrument should be explained in Column 30 ('Further information')
5	Instrument identifier	For listed bonds this will be the ISIN number. If not available an alternative unique identifier should feature, if applicable.
6	Seniority	Entry should choose from the following options: Super-senior, Senior, Mezzanine/2nd Lien, Junior/Subordinated, Other If choosing 'Other', the seniority of the instrument should be explained in Column 30 ('Further information')
7	Long term issue credit rating	Applies only to debt instruments with a credit rating. This should be the long-term issue credit rating applicable as at 31 March 20xx. Ratings from multiple ratings agencies may be entered into the box.
8	Currency	Currency the instrument was originally issued in.
9	Issue date	Required for all instruments. The issue date should be the relevant date for the contractual arrangements that inform the financial impact of the instrument as at March 31 2021. For swaps this could be the restructuring date or novation date, rather than the original issue date.
10	Issue price	The ratio of issuance proceeds to face value, expressed in parts of 100. E.g. 99 means a ratio of 99:100. For most debt instruments we expect this will be 100, however some listed bonds and other instruments (e.g. Artesian debt) may have a different issue price.
11	Maturity date	Date on which the instrument matures.
12	Years to maturity	 This should usually be calculated as number of years from the 31 March 20xx until maturity. Three important exceptions are: a) <u>Amortising debt</u>: This cell should be populated with weighted average years to maturity. b) <u>Irredeemable instruments</u>: Such instruments should have 25 years to maturity assigned. c) <u>Instantly callable instruments</u>: These should be classified as loans due in less than one year.
13	Original issuance / facility size	This should contain the original issuance amount in £m, or where the instrument is a credit facility or RCF, the total size of facility.
14	Principal outstanding	This should contain the principal owed in £m on 31 March 20xx, including accretion on index-linked bonds.

Column	Title	Definition
15	Amount used to calculate nominal and cash interest cost	Usually this will be the same as 14: 'Principal sum outstanding'. Index-linked bonds should include accretion. The principal associated with the receiving leg of swaps should carry a negative sign.
16	Years to maturity x principal sum	Calculation field.
17	RPI interest rate	The rate associated with the instrument, in RPI-deflated terms.
18	CPI interest rate	The rate associated with the instrument, in CPI-deflated terms.
19	Reference benchmark	Name of floating rate benchmark (e.g. 3 month SONIA). Only needed for floating rate debt or facilities priced using a benchmark.
20	Reference interest rate	Nominal interest rate of reference benchmark (e.g. 1.55%). Only needed for floating rate debt or facilities priced using a benchmark.
21	Margin over reference rate	The margin applying to the reference rate (e.g. 0.50%). Only needed for floating rate debt or facilities priced using a benchmark.
22	Nominal interest rate	The rate associated with the instrument, in nominal terms.
23	Nominal interest cost	Annualised nominal interest cost associated with the instrument in $\pounds m$.
24	Cash interest cost	Annualised cash interest cost associated with the instrument in £m.
25	Utilisation fee	The ongoing annualised fee applying to any drawn down amounts from a facility (e.g. 0.10%)
26	Commitment fee	The ongoing annual fee applying to any undrawn amounts from a facility (e.g. 0.20%)
27	Issuance costs	These should be the external costs associated with the original issuance of the underlying instrument (e.g. arrangement fee). Internal staff time should not be capitalised to avoid double counting revenues covered by the totex allowance. The costs of liquidity facilities should not be included. Where issuance costs are capitalised into principal this should be indicated in Column 30 ('Further information').
28	Value per balance sheet at 31 March 20xx	Book value of instrument.
29	Fair value of debt at 31 March 20xx	Fair value of instrument.
30	Swap category	The swap category as set out in the table below under the heading 'Additional information on swaps' needs to be added here. Leave blank for instruments that are not a derivative.

RAG 4.11 – Guideline for the table definitions in the annual performance report

Column	Title	Definition
31	Further information	Additional space to add further detail on the instrument.
		For swap instruments, based on the category they fall under, please provide extra detail on the swap's features including any non-standard features.
		For example, if the swap is in category A or B and has a mutual break, state it has a mutual break and provide the date(s) of the mutual break(s); if the swap is an index-linked swap with accretion pay down, state this is the case and provide the pay-down dates (for example, 'the inflation accretion will be paid down on dd-mmm-yyyy and every 'z' years after that until maturity' – where 'z' is a number). Additional detail may also be included if it will help to understand the swap instrument. If the swap includes an embedded option, please give details on the nature of the option, including which party has the right to exercise the specified option and when? If the embedded option is an American-style option, for example, please provide the range of dates during which the option can be exercised.
		If any swap has a change in margin (i.e. a step up or a step down in either the fixed rate or the spread over SONIA, previously LIBOR, in the middle of the swap's term) provide information on the date(s) of the change and what the rate or spread changes from and to. This can be included in the table or as accompanying narrative to the table, whichever is more appropriate. For a category D swap no additional detail is needed unless the swap has unique features that have not been listed in another column of the table.

4.4 We have included 200 lines per block (800 in total) for companies to report all relevant debt instruments. Companies should not add any columns to the table.

Derivatives

- 4.5 Where companies have used swaps in a designated hedging arrangement, they must report the paying and receiving legs in separate lines, with an additional line for the underlying debt instrument. The only exception is for instruments in a designated currency swap. In this case, companies may enter details of the post-currency swap characteristics, without splitting out the currency swap line(s).
- 4.6 If companies are using any other financial derivatives, including for example interest rate swaps, inflation swaps or forex swaps not as part of a designated (or economic) hedging arrangement, we expect companies to report these as separate lines.
- 4.7 For all financial derivatives we expect companies to clearly report all relevant information, for example the date at which any derivatives expire, as well as any credit breaks and the frequency thereof.

Index linked debt and inflation

- 4.8 We have separated index linked instruments into RPI and CPI linked issuance.
- 4.9 We have included columns 17:('RPI interest rate') and 18:('CPI interest rate') to allow reporting of the relevant real CPI or real RPI coupon. Consistent with table 1E we expect companies to use the ONS year on year annualised inflation figure from the most recent March.
- 4.10 We are aware of some CPI-linked issuance in the sector; however we are unaware of any CPIH linked issuance, and the two inflation metrics track each other closely. We therefore do not currently consider it would be efficient to include a separate block for CPIH-linked issuance. Where companies issue CPIH-linked instruments these should therefore be input in Block D (CPI-linked instruments).

Additional clarifications

- 4.11 Companies should report all current (at 31 March) debt instruments irrespective of maturity date. Where companies have arranged forward starting instruments beyond this date we expect companies to report these. Companies should report the start date in the 'Issue date' column.
- 4.12 Companies should also report all quasi-debt, including, for example, finance leases or preference shares. Operating leases that will be categorised as finance leases under IFRS16 should also be reported. Companies should indicate clearly using the 'Further Information' column if the debt instrument is an operating lease etc.
- 4.13 We do not require companies to report cash in this table.
- 4.14 We expect companies to report any revolving credit facilities in the relevant part of the table. Companies should report the ordinary interest rate on drawn funds from such facilities separately from any utilisation fee (reported separately in column 25). Any additional commitment fee can be captured in column 26. The facility size of any revolving facility should be reported in column 13 ('Original issuance / facility size), while the principal sum outstanding should reflect the amount drawn as at 31 March.
- 4.15 The total fees directly relating to the issuance of an instrument should be reported in column 27 ('Issuance costs'). We anticipate that such costs could include registration, legal, accounting, credit rating and underwriting fees. They should not however include costs of liquidity facilities or costs addressed elsewhere in Table 4B (notably commitment or utilisation fees). Companies should

not report capitalised costs as separate lines or reflect costs in the outstanding principal for the instrument. Neither should overhead (e.g. internal staff) costs feature in this figure – as these costs are funded via totex.

4.16 If companies have debt instruments where the interest payable is not directly based on the principal sum outstanding, companies should indicate the principal sum outstanding in column 14 and the figure on which annualised interest costs are based in column 15. If interest payments are based on the principal sum outstanding, companies should simply ensure that this figure is entered in both columns.

Line	Title	Definition
4B.808	Indicative weighted average nominal interest rate	Calculated as 4B.805 column 23 divided by 4B.805 column 14
4B.809	Indicative weighted average cash interest rate	Calculated as 4B.805 column 24 divided by 4B.805 column 14
4B.810	Floating rate debt as % of total debt (gross)	Calculated as 4B.402 column 14 divided by 4B.805 column 14
4B.811	Fixed rate debt as % of total debt (gross)	Calculated as 4B.201 column 14 divided by 4B.805 column 14
4B.812	RPI linked debt as % of total debt (gross)	Calculated as 4B.603 column 14 divided by 4B.805 column 14
4B.813	CPI linked debt as % of total debt (gross)	Calculated as 4B.804 column 14 divided by 4B.805 column 14
4B.814	All index (CPI and RPI) linked debt as % of total debt (gross)	Calculated as the sum of 4B.812 and 4B.813
4B.815	Fixed rate debt and index linked debt as % of total debt (gross)	Calculated as the sum of 4B.811 and 4B.814
4B.816	Weighted average years to maturity	Calculated as 4B.805 column 16 divided by 4B.805 column 1

Additional information on swaps

- 4.17 Table 4B, column 30 requires a swap category to be identified for all derivatives. The swap categories A, B, C and D are defined below.
- 4.18 The term derivative refers to any type of derivative contract and includes but is not limited to interest rate swaps, cross currency swaps, futures, options, energy derivatives and commodity derivatives.

Swap category	Swap type	Description
A	Super-senior swaps with breaks or accretion paydowns	 This is all super senior derivatives (whether or not they are related to a debt instrument) that: have a break clause however defined. This includes derivatives with: mandatory break clauses (swap counterparties must terminate or restructure the derivative contract on specific dates); or mutual break clauses (swap counterparties can decide whether or not to terminate or restructure the derivative contract is terminated if a certain event occurs) – if the event is not linked to a specific date, then the company must use their best assessment of when the relevant event is likely to occur. If the event is considered unlikely to occur and the swap is included in category 'D', a brief explanation must be provided on why the contingent event has been considered unlikely; or other types of break clauses. i. are inflation swaps where the inflation accretion is periodically paid-down (i.e. before an index-linked swap's maturity). Provide information on the frequency of pay downs under line 31. The swap category detail must explain the type of swaps and the dates and type of break clause and accretion paydowns plus any relevant detail on the break clause or the nature of accretions.
В	Pari-passu swaps with breaks or accretion paydowns	This is similar to category A but is only for pari-passu swaps, that is, swaps that do not rank super-senior to other creditors.
С	Super-senior swaps without break clauses or accretion pay-downs	This is all derivatives (whether or not they are related to a debt instrument) that rank ahead of other creditors in an administration or enforcement scenario but which do not have break clauses; that is, swaps liabilities that would have priority to be paid ahead of senior creditors (for example Class A lenders) that rank pari passu.
D	Other swaps	This is all derivatives (whether or not they are related to a debt instrument) that do not fall into category A, B or C. All vanilla swaps should be in this category as well as standard energy swaps or commodity swaps. Under 'Further information' companies should specify the type of swap.

Pro forma 4C: Impact of price control performance to date on RCV

4.19 This table allows the user of the APR to anticipate the impact on the RCV at the end of the price control period as a result of cumulative performance to date.

Line	Title	Definition
4C.1	Final determination allowed totex (net of business rates, abstraction licence fees, grants and contributions and other items not subject to cost sharing)	The company's allowed totex in the final determination, net of allowed totex for business rates, Environment Agency / Natural Resources Wales abstraction licence fees, grants and contributions and other items not subject to cost sharing, as published in Ofwat's Financial Flows data reference document on our website alongside the annual publication of the Regulatory Capital Values. Values should be inflated using the average CPIH figure for the reporting year/ price control period.
4C.2	Actual totex (excluding business rates, abstraction licence fees, grants and contributions and other items not subject to cost sharing)	The company's actual totex, excluding business rates and Environment Agency / Natural Resources Wales abstraction licence fees and income offset grants and contributions and other items not subject to cost sharing, as reported in: Actual totex – 2B.26 Less the sum of costs excluded from cost sharing or with separate sharing rates: Income offset payments – 2E.15/2E.27 Non price control grants and contributions (negative number) – sum of 2E.4–6/2E.17-19/2E.29–31 Third party services (opex) – 2B.13 Third party services (capex) – 2B.20 Other cash items – 2B.25 Pension deficit recovery costs – 2B.24 Actual expenditure on innovation projects funded through the innovation competition – 9A.24 Non-section 185 diversions – 4P.12 Abstraction charges (water only) – 2B.3 Local authority and cumulo rates – 2B.8 Strategic scheme development costs – 4L.37
4C.3	Transition expenditure	Green recovery expenditure – 4U.2 Expenditure incurred in 2019-20 for the delivery of outcomes in the price control period 2020-25 and that was included in the totex allowance at PR19.
4C.4	Disallowable costs	In setting price controls, we have used an overarching principle that costs should only feature in our totex for cost sharing for activities where it is appropriate for a company to share an over (or under) spend with their customers. We define disallowable items as costs that do not conform to this overarching principle. These include: costs associated with impairment of other businesses; costs related to financing (bond issuance fees, refinancing, takeover costs); fines and investigation costs; compensation claims; and any other costs where the activity driving it does not, ex ante, have a reasonable expectation of customer benefit.
4C.5	Total actual totex (net of business rates, abstraction licence fees and grants and contributions)	The sum of lines 4C.2 and 4C.3 minus 4C.4.

Line	Title	Definition
4C.6	Variance	4C.5 minus 4C.1
4C.7	Variance due to timing of expenditure	The value due to a variation in the timing of the planned expenditure. (i.e. accelerated or deferred)
4C.8	Variance due to efficiency	4C.6 minus 4C.7
4C.9	Customer cost sharing rate - outperformance	The customer cost sharing rate for outperformance as published in Ofwat's Financial Flows data reference document on our website alongside the annual publication of the Regulatory Capital Values.
4C.10	Customer cost sharing rate - underperformance	The customer cost sharing rate for underperformance as published in Ofwat's Financial Flows data reference document on our website alongside the annual publication of the Regulatory Capital Values.
4C.11	Customer share of totex overspend	4C.8 multiplied by 4C.10
4C.12	Customer share of totex underspend	4C.8 multiplied by 4C.9
4C.13	Company share of totex overspend	4C.8 less 4C.11
4C.14	Company share of totex underspend	4C.8 less 4C.12
4C.15	Final determination allowed totex - business rates and abstraction licence fees	The company's allowed totex in the final determination for business rates and Environment Agency / Natural Resources Wales abstraction licence fees as published in Ofwat's Financial Flows data reference document on our website alongside the annual publication of the Regulatory Capital Values. Values should be inflated using the average CPIH figure for the reporting year/ price control period.
4C.16	Actual totex – business rates and abstraction licence fees	The company's actual totex for business rates and Environment Agency / Natural Resources Wales abstraction licence fees as reported in: Business rates – line 2B.8 Abstraction charges – line 2B.3
4C.17	Variance - business rates and abstraction licence fees	4C.16 less 4C.15
4C.18	Customer cost sharing rate- business rates	For companies with an Ofwat final determination: The customer cost sharing rate as published in the final determination – 75%.
		For companies with a CMA final determination: The CMA sharing rate of 90% should be used.
4C.19	Customer cost sharing rate- abstraction licence fees	For companies with an Ofwat final determination: The customer cost sharing rate as published in the final determination – 75%.
	1003	For companies with a CMA final determination:
		For water resources and water network plus, the CMA's sharing rate 75% for abstraction charges.
		For wastewater network plus and bioresources, the CMA sharing rate of 90% should be used.

Line	Title	Definition
4C.20	Customer share of totex over/underspend- business rates and abstraction licence fees	 For companies with an Ofwat final determination: Companies should take 4C.17 and multiply by the rates in 4C.18 and 4C.19. For companies with a CMA final determination: For water resources and water network plus, companies should calculate a hybrid cost sharing rate based on the CMA's sharing rates of 90% for business rates and 75% for abstraction charges and companies' actual variances of each. How this has been calculated should be included in companies' commentaries. For wastewater network plus and bioresources, the CMA
		sharing rate of 90% should be used.
4C.21	Company share of totex over/underspend- business rates and abstraction licence fees	4C.17 minus 4C.20.
4C.22	Final determination allowed totex not subject to cost sharing	The company's allowed totex in the final determination for third party services, strategic regional water resource development schemes, other cash items and non-s185 diversions as published in Ofwat's Financial Flows data reference document on our website alongside the annual publication of the Regulatory Capital Values.
4C.23	Actual totex not subject to cost sharing	The company's actual totex for items not subject to cost sharing – non-s185 diversions – line 4P.3 innovation fund – line 9A.20 strategic water resource development schemes –line 4L.37 other cash items – line 2B.25 income offset non-price control grants and contribution income pension deficit repair costs third party services opex and capex disallowable costs as reported in 4C.4
4C.24	Variance – 100% company allocation	4C.23 less 4C.22
4C.25	Total customer share of totex over/under spend	The sum of lines 4C.11, 4C.12 and 4C.20
4C.26	Total customer share of totex over/under spend	Copied from 4C.25
4C.27	PAYG rate	The appropriate PAYG rate as published in Ofwat's Financial Flows data reference document on our website alongside the annual publication of the Regulatory Capital Values. For 'Price control period date' the average value should be used.
4C.28	RCV element of cumulative totex over/underspend	4C.26 multiplied by (1- 4C.27)

Line	Title	Definition
4C.29	Adjustment for ODI outperformance payment or underperformance payment	RCV impact of the outperformance payment or underperformance payment from the ODI.
4C.30	Green recovery	Copied from 4U.14.
4C.31	RCV determined at FD at 31 March	RCV at 31 March per the 2019 price determination inflated using the appropriate CPIH and RPI values – these are published on the OFWAT website annually in April.
4C.32	Projected shadow RCV	Sum of 4C.28 to 4C.31.

Pro forma 4D: Totex analysis for the 12 months ended 31 March 20xx - wholesale water resources and water network+

4.20 Operating expenditure should be reported **net of the principal use recharges** between the price control units so that the costs at a price control level can be properly recorded.

Line	Title	Definition
4D.1	Base operating expenditure	Operating expenditure excluding third party opex to deliver base levels of service. This line should equal line 4J.14
4D.2	Enhancement operating expenditure	Enhancement operating expenditure excluding third party opex. This line should equal line 4L.112.
4D.3	Developer services operating expenditure	Total developer services operating expenditure including third party opex. This line should equal line 4N.6 (opex) plus 4P.8 (water resources and water network+).
4D.4	Total operating expenditure excluding third party services	Total operating costs excluding base and enhancement third party services but including developer services third party services. The sum of lines 4D.1 to 4D.3.
4D.5	Third party services	Operating expenditure for providing third party services. See appendix 1. Excludes developer services third party services opex as this is included in line 4D.3.
4D.6	Total operating expenditure	Total operating expenditure for the wholesale business only within each business category. The sum of lines 4D.4 and 4D.5. This should reconcile to wholesale operating expenditure in table 2A line 5 and 2B line 14.
4D.7	Grants and contributions - operating expenditure	Grants and contributions – operating expenditure. The operating expenditure element of the water resources and water n+ grants and contributions reported in lines 2E.7 and 2E.20. Input as a positive number.
4D.8	Base capital expenditure	Capital expenditure excluding third party capex to maintain the long-term capability of assets and to deliver base levels of service. Where projects have drivers both of enhancement and capital maintenance, companies should apply a method of proportional allocation to allocate costs between enhancement and capital maintenance.

Line	Title	Definition
4D.9	Enhancement capital expenditure	Total enhancement capital expenditure excluding third party capex. This line should equal line 4L.111
4D.10	Developer services capital expenditure	Total developer services capital expenditure including third party capex. This line should equal line 4N.6 (capex) plus 4P.4 (water resources and water network+).
4D.11	Total gross capital expenditure excluding third party services	Total gross capital expenditure excluding base and enhancement third party services but including developer services third party services - the sum of lines 4D.8 to 4D.10
4D.12	Third party services	Capital expenditure for providing third party services. See appendix 1. Excludes developer services third party services capex as this is included in line 4D.10.
4D.13	Total gross capital expenditure	The sum of lines 4D.11 and 4D.12.
4D.14	Grants & contributions - capital expenditure	Grants and contributions – capital expenditure. The capital expenditure element of the water resources and water n+ grants and contributions reported in lines 2E.7 and 2E.20. Input as a positive number.
4D.15	Net totex	The sum of lines 4D.6 and 4D.13 less the sum of 4D.7 and 4D.14.
4D.16	Pension deficit recovery payments	Actual pension deficit recovery payments including costs capitalised and any group recharges for pension deficit costs. Companies that report under FRS102 should include the element of the statutory charge attributable to deficit payments in this line rather than block A above.
4D.17	Other cash items	Other cash items not included in totex.
4D.18	Totex including cash items	The sum of lines 4D.15 to 4D.17.
4D.19- 4D.23	Atypical expenditure items	Please specify atypical items in the lines 4D.19 to 4D.23. Atypical items are defined as unusual items outside ordinary activities. This would include items such as office moves and one-off reorganisations. For avoidance of doubt these items should be included in lines 1 to 18 above but in the item description state the line that it is included in. Costs should be entered as a positive number and any
		income/rebates entered as a negative number.
4D.24	Total atypical expenditure	Total atypical expenditure. Calculated as the sum of lines 4D.19 to 4D.23.

Pro forma 4E: Totex analysis for the 12 months ended 31 March 20xx – wholesale wastewater

4.21 Operating expenditure should be reported net of the principal use recharges between the price control units so that the costs at a price control level can be properly recorded.

Line	Title	Definition
4E.1	Base operating expenditure	Operating expenditure excluding third party opex to deliver base levels of service. This line should equal line 4K.14.
4E.2	Enhancement operating expenditure	Total enhancement operating expenditure excluding third party opex. This line should equal line 4M.87.
4E.3	Developer services operating expenditure	Total developer services operating expenditure including third party opex. This line should equal line 40.12 plus 4P.8 (wastewater network+).
4E.4	Total operating expenditure excluding third party services	Total operating costs excluding base and enhancement third party services but including developer services third party services. The sum of lines 4E.1 to 4E.3.
4E.5	Total third party services	Operating expenditure for providing third party services. See appendix 1.
4E.6	Total operating expenditure	Total operating expenditure for the wholesale business only within each business category. The sum of lines 4E.4 and 4E.5. This should reconcile to operating expenditure in table 2A line 5 and 2B line 14.
4E.7	Grants and contributions - operating expenditure	Grants and contributions – operating expenditure. The operating expenditure element of the wastewater n+ grants and contributions reported in line 2E.32. Input as a positive number.
4E.8	Base capital expenditure	Capital expenditure excluding third party capex to maintain the long-term capability of assets and to deliver base levels of service. Where projects have drivers both of enhancement and capital maintenance, companies should apply a method of proportional allocation to allocate costs between enhancement and capital maintenance.
4E.9	Enhancement capital expenditure	Total enhancement capital expenditure excluding third party capex. This line should equal line 4M.86.
4E.10	Developer services capital expenditure	Total developer services capital expenditure including third party capex. This line should equal the sum of lines 40.6 and 4P.4 (wastewater network+).
4E.11	Total gross capital expenditure excluding third party services	Total gross capital expenditure excluding base and enhancement third party services but including developer services third party services - the sum of lines 4E.8 to 4E.10.
4E.12	Third party services	Capital expenditure for providing third party services. See appendix 1
4E.13	Total gross capital expenditure	The sum of lines 4E.11 and 4E.12.
4E.14	Grants & contributions - capital expenditure	Grants and contributions – capital expenditure. The capital expenditure element of the wastewater n+ grants and contributions reported in line 2E.32. Input as a positive number.
4E.15	Net totex	The sum of lines 4E.6 and 4E.13 less the sum of 4E.7 and 4E.14.
4E.16	Pension deficit recovery payments	Actual pension deficit recovery payments including costs capitalised and any group recharges for pension deficit costs. Companies that report under FRS102 should include the element of the statutory charge attributable to deficit payments in this line rather than block A above.
4E.17	Other cash items	Other cash items not included in totex.

Line	Title	Definition
4E.18	Totex including cash items	The sum of lines 4E.15 to 4E.17.
4E.19- 4E.23	Atypical expenditure items	Please specify atypical items in lines 4E.19 to 4E.23. Atypical items are defined as unusual items outside ordinary activities. This would include items such as office moves and one-off reorganisations. For avoidance of doubt these items should be included in lines 1 to 18 above but in the item description state the line that it is included in. Costs should be entered as a positive number and any income/rebates entered as a negative number.
4E.24	Total atypical expenditure	Total atypical expenditure. Calculated as the sum of lines 4E.19 to 4E.23.

Pro forma 4F: Major project capital expenditure by purpose for the 12 months ended 31st March 20xx - wholesale water

Line	Title	Definition
4F.1- 4F.10	Capital expenditure purpose – additional line x	Capital expenditure to deliver the major project during the report year. (directly attributable costs only)
4F.11	Total major project capital expenditure	Total of lines 4F.1 to 4F.10
4F.12- 4F.21	Operating expenditure purpose – additional line x	Operating expenditure to deliver the major project during the report year. (directly attributable costs only)
4F.22	Total major project operating expenditure	Total of lines 4F.12 to 4F.21

4.22 Costs recorded should be the direct costs related to the delivery of the relevant major project.

Pro forma 4G: Major project capital expenditure by purpose for the 12 months ended 31st March 20xx - wholesale wastewater

Line	Title	Definition
4G.1- 4G.10	Capital expenditure purpose – additional line x	Capital expenditure to deliver the major project during the report year. (directly attributable costs only)
4G.11	Total major project capital expenditure	Total of lines 4G.1 to 4G.10
4G.12- 4G.21	Operating expenditure purpose – additional line x	Operating expenditure to deliver the major project during the report year. (directly attributable costs only)

Line	Title	Definition
	Total major project operating expenditure	Total of lines 4G.12 to 4G.21

4.23 Costs recorded should be the direct costs related to the delivery of the relevant major project.

Pro forma 4H: Financial metrics

Line	Title	Definition
4H.1	Net debt	The sum of table 1E lines 3 to 5. Equal to table 1E line 6.
4H.2	Regulatory equity	Regulatory equity is calculated as year-end regulatory capital value (RCV) less net debt at the period end. Equal to table 4C line 31 less table 1E line 6.
4H.3	Regulatory gearing	Regulatory gearing calculated as net debt in table 1E line 6 divided by RCV in table 4C line 31. Equal to table 1E line 7.
4H.4	Post tax return on regulatory equity	Profit after current tax for the appointed business for the year as a % of average regulatory equity. Profit after current tax should exclude any fair value gains losses on financial derivatives (table 1A line 9 less line 12). For this metric average regulatory equity is a simple average of the regulatory equity at the start and end of the year.
		Regulatory equity at each year end is calculated in table 4H line 2. The opening regulatory equity at 31 March 2020 should be calculated after the impact of any midnight adjustment to RCV.
4H.5	RORE (return on regulatory equity)	RORE calculates the returns on a regulatory basis by reference to the notional regulated equity, calculated using notional gearing level (60.0% for PR19) and average RCV for each year. This value should be taken from table 1F line 17 – RORE, actual returns and notional regulatory equity % for the current year and average AMP to date. (Values will be calculated in 2017-18 price
4H.6	Dividend yield	base as per Table 1F) Calculated as the total appointee dividend for the year (as would be included in the statement of changes in equity) / divided by actual year end regulated equity (table 4H line 2). This includes any dividends paid to a holding company solely to enable that company to pay interest on any loan from the appointee or to pay interest or management charges for other group companies.
4H.7	Retail profit margin - Household	The retail profit margins should be calculated as earnings before interest and tax (after deducting wholesale charges) divided by total revenue charged to household or non- household customers respectively. The EBIT figures used above should reflect both net recharges costs and third-party services operating expenditure but should exclude pension deficit repair costs. Calculated as $(21.20 - 2C.18 - 2C.19)$ divided by $(21.18 + 21.19 + 21.16)$.

Line	Title	Definition
4H.8	Retail profit margin - Non household	The retail profit margins should be calculated as earnings before interest and tax (after deducting wholesale charges) divided by total revenue charged to household or non- household customers respectively. The EBIT figures used above should reflect both net recharges costs and third-party services operating expenditure but should exclude pension deficit repair costs. Calculated as (21.20 – 2C.18 – 2C.19) divided by (21.18 + 21.19 + 21.16).
4H.9	Credit rating - Fitch	Credit rating issued by Fitch Ratings Limited. The company should include only the lowest of the monitored credit ratings as set out by Ofwat in letters to each company. Companies should also provide details of the "Outlook/Watch" status of the rating.
4H.10	Credit rating – Moody's	Credit rating issued by Moody's Investors Services Incorporated. The company should include only the lowest of the monitored credit ratings as set out by Ofwat in letters to each company. Companies should also provide details of the "Outlook/Watch" status of the rating.
4H.11	Credit rating – S&P	Credit rating issued by Standard and Poor's Rating Group. The company should include only the lowest of the monitored credit ratings as set out by Ofwat in letters to each company. Companies should also provide details of the "Outlook/Watch" status of the rating
4H.12	Return on RCV	Calculated as profit before interest less current tax (table 1A line 4 plus table 1A line 5 less table 1A line 12) divided by the average RCV for the year. The average RCV for the year should be in the year average price base for the year as it appears on the Ofwat website, and it should take account of any midnight adjustment to RCV at 31 March 2020. This can be sourced from the annual OFWAT RCV publication.
4H.13	Dividend cover	Profits of the appointed business for the year before dividends (table 1A line 14) divided by total appointee dividend for the year (table 1A line 15) (as would be included in the statement of changes in equity, less any dividends paid to a holding company solely to enable that company to pay interest on an intergroup loan from the appointee). This includes any dividends paid to a holding company solely to enable that company to pay interest on any loan from the appointee or to pay interest or management charges for other group companies. If dividends are zero, then zero should be entered in this cell.
4H.14	Funds from operations (FFO)	Funds from operations (FFO) is net cash generated from operating activities (1D.12) minus changes in working capital (1D.5). We acknowledge that our approach to calculating this differs from some of the methodologies applied by the credit rating agencies
4H.15	Interest cover ratio (cash) (ICR)	FFO (4H.14) pre Net Interest (1D.10) / Interest paid (cash). Interest paid all cash interest paid after the impact of swap arrangements and excludes any accretion of index linked debt which is a non-cash item. All companies are to provide a breakdown of their ICR calculation at 31 March. The breakdown should be clear how the interest paid value ties into the company's Net Interest Paid figure as reported at 1D.10

Line	Title	Definition
4H.16	Adjusted cash interest cover ratio (ACICR)	 FFO (4H.14) pre Net Interest (1D.10) – RCV Run Off / Interest Paid (cash). RCV run off is set out in the final determinations and should be adjusted to the year-end price base using CPIH. Interest paid is all cash interest paid after the impact of swap arrangements and excludes any accretion of index linked debt which is a non-cash item. All companies are to provide a breakdown of their ACICR calculation at 31 March. The breakdown should be clear how the interest paid value ties into the company's Net Interest Paid
4H.17	FFO/Net Debt	figure as reported at 1D.10 Ratio of FFO to net debt (4H.14 / 4H.1). We acknowledge that our approach to calculating this differs from some of the methodologies applied by the credit rating agencies."
4H.18	Effective tax rate	Effective tax rate is the current tax charge for the appointed business before any adjustments in respect of prior period (1A.16), as a % of the profit before tax and fair value movements for the appointed business (1A.9). Calculated as 1A.16 divided by 1A.9.
4H.19	Retained cash flow (RCF)	Retained Cash Flow (RCF) equals FFO (Funds From Operations) less equity dividend paid. Equal to table 4H line 14 less table 1D line 19.
4H.20	RCF/net debt	Retained Cash Flow (RCF)/Net Debt is calculated as; FFO less equity dividend paid, as a proportion of net debt. Equal to table 4H line 19 divided by 4H line 1.
4H.21	Proportion of borrowings which are fixed rate	Equal to table 1E line 1 (fixed rate) plus table 1E line 2 divided by table 1E line 3.
4H.22	Proportion of borrowings which are floating rate	Equal to table 1E line 1 (floating rate) divided by table 1E line 3.
4H.23	Proportion of borrowings which are index linked	Equal to table 1E line 1 (RPI) plus 1E line 1 (CPI/CPIH) divided by table 1E line 3.
4H.24	Proportion of borrowings due within 1 year or less	In this line please provide details of the % of borrowings (table 1E line 3) which falls into this category.
4H.25	Proportion of borrowings due in more than 1 year but no more than 2 years	In this line please provide details of the % of borrowings (table 1E line 3) which falls into this category.
4H.26	Proportion of borrowings due in more than 2 years but no more than 5 years	In this line please provide details of the % of borrowings (table 1E line 3) which falls into this category.
4H.27	Proportion of borrowings due in more than 5 years but no more than 20 years	In this line please provide details of the % of borrowings (table 1E line 3) which falls into this category.
4H.28	Proportion of borrowings due in more than 20 years	In this line please provide details of the % of borrowings (table 1E line 3) which falls into this category.

Pro forma 4I: Financial derivatives

4.24 Figures for this table should be based on company financial instruments, which we have requested companies set out in Table 4B: 'Analysis of debt', which we are requesting from companies as part of their submission. We expect information to be based on the external market position of the company – i.e. exposures should therefore include derivatives held in the financing company (that issues debt on behalf of the regulated company). Table 4I has now been updated to include five blocks for additional data required, as follows:

Total Financial Derivatives Category A Financial Derivatives – Super-senior swaps with breaks or accretion paydowns Category B Financial Derivatives – Pari-passu swaps with breaks or accretion paydowns Category C Financial Derivatives – Super-senior swaps without breaks or accretion paydowns Category D Financial Derivatives – Other swaps

- 4.25 The first block in table 4I shows the break down for all financial derivatives held by the company. The subsequent four blocks reflect a sub-category of derivatives and in total the four blocks A to D should sum to the figures in first block for the equivalent cell.
- 4.26 We expect entries to the first block in table 4I 'Total Financial Derivatives' to be consistent with the derivative positions reported in Table 4B. Out-of-the-money (liability) positions should be presented as positive, in-the-money (asset) positions should be presented as negative. A footnote should be included with the table explaining that this is the case.
- 4.27 Where the total mark-to-market in 4B differs from the total mark-to-market for all financial derivatives in 4I, companies should provide a reconciliation. Companies should also provide a reconciliation to table 1C.
- 4.28 The financial derivatives that should be reported within categories A, B, C and D are defined above under 'Additional information on swaps'. We expect Table 41: Total Financial Derivatives to be the sum of the four tables A, B, C and D.
- 4.29 Where the mark to market position for total financial derivatives (41.27) in the first block of table 41 'Total Financial Derivatives' is different to the financial instruments position reported in table 1C (net position of 1C.5, 1C.10 and 1C.16), companies should provide a reconciliation.

- 4.30 Where financial derivative instruments contain the provision for break dates, the instrument should be reported in accordance with the expected maturity date.
- 4.31 Companies should provide details of any assumptions that have been made in a note to the table.
- 4.32 The input value for the "Total accretion at 31 March" column is equal to the inflation-uplift on the notional amount of index-linked swaps as at 31 March. This inflation-uplift will not be paid or received until maturity of the relevant swap instrument.

Line	Title	Definition
41.1	Floating to fixed rate	Financial instruments through which floating interest rate liabilities are converted into fixed rate interest rate liabilities. Where the rate payable on an instrument is designated as a margin over a specified reference rate (e.g. SONIA plus X%), please include an assumption of the reference rate to determine the rate payable.
41.2	Floating from fixed rate	Financial instruments through which floating interest rate liabilities are converted from fixed rate interest rate liabilities. Where the rate payable on an instrument is designated as a margin over a specified reference rate (e.g. SONIA plus X%), please include an assumption of the reference rate to determine the rate payable.
41.3	Floating to index linked	Financial instruments through which floating interest rate liabilities are converted into inflation linked interest rate liabilities. Where the rate payable on an instrument is designated as a margin over a specified reference rate (e.g. SONIA plus X%), please include an assumption of the reference rate to determine the rate payable.
41.4	Floating from index linked	Financial instruments through which floating interest rate liabilities are converted from inflation linked interest rate liabilities. Where the rate payable on an instrument is designated as a margin over a specified reference rate (e.g. SONIA plus X%), please include an assumption of the reference rate to determine the rate payable.
41.5	Fixed to index-linked	Financial instruments through which fixed interest rate liabilities are converted into inflation linked interest rate liabilities. Where the rate payable on an instrument is designated as a margin over a specified reference rate (e.g. SONIA plus X%), please include an assumption of the reference rate to determine the rate payable.
41.6	Fixed from index- linked	Financial instruments through which fixed interest rate liabilities are converted from inflation linked interest rate liabilities. Where the rate payable on an instrument is designated as a margin over a specified reference rate (e.g. SONIA plus X%), please include an assumption of the reference rate to determine the rate payable.

Line	Title	Definition
41.7	Index linked to index- linked	Financial instruments through which inflation linked interest rate liabilities are converted to other forms of inflation linked interest rate liabilities (e.g. RPI-linked to CPI-linked). Where the rate payable on an instrument is designated as a margin over a specified reference rate (e.g. SONIA plus X%), please include an assumption of the reference rate to determine the rate payable.
41.8	Total	The total of the interest rate swaps. The sum of table 4I lines 1 to 7.
41.9	Cross currency swap USD	Financial instruments which convert debt liabilities from US Dollars into Pounds Sterling.
41.10	Cross currency swap EUR	Financial instruments which convert debt liabilities from Euro into Pounds Sterling.
41.11	Cross currency swap YEN	Financial instruments which convert debt liabilities from Yen into Pounds Sterling.
41.12	Cross currency swap Other	Financial instruments which convert debt liabilities from currencies other than US Dollars, Euro or Yen into Pounds Sterling.
41.13	Total	Total of currency swap financial instruments. The sum of table 4I lines 9 to 12.
41.14	Currency interest rate swaps USD	Financial instruments which convert currency in which interest is paid or payable from US Dollars into Pounds Sterling.
41.15	Currency interest rate swaps EUR	Financial instruments which convert currency in which interest is paid or payable from Euro into Pounds Sterling.
41.16	Currency interest rate swaps YEN	Financial instruments which convert currency in which interest is paid or payable from Yen into Pounds Sterling.
41.17	Currency interest rate swaps Other	Financial instruments which convert currency in which interest is paid or payable from currencies other than US Dollars, Euro or Yen into Pounds Sterling.
41.18	Total	Total of instruments which convert the currency in which interest is paid between sterling and another currency. The sum of table 4I lines 14 to 17.
41.19	Forward currency contracts USD	Forward contracts which convert future debt obligations from US Dollars into Pounds Sterling.
41.20	Forward currency contracts EUR	Forward contracts which convert future debt obligations from Euro into Pounds Sterling.
41.21	Forward currency contracts YEN	Forward contracts which convert future debt obligations from Yen into Pounds Sterling.
41.22	Forward currency contracts CAD	Forward contracts which convert future debt obligations from Canadian Dollars into Pounds Sterling.
41.23	Forward currency contracts AUD	Forward contracts which convert future debt obligations from Australian Dollars into Pounds Sterling.
41.24	Forward currency contracts HKD	Forward contracts which convert future debt obligations from Hong Kong Dollars into Pounds Sterling.
41.25	Forward currency contracts Other	Forward contracts which convert future debt obligations from currencies other than US, Canadian, Australian or Hong Kong Dollars, Euro or Yen into Pounds Sterling.

Line	Title	Definition
41.26	Total	Total of forward contracts which convert debt between currencies. The sum of table 4I lines 19 to 25.
41.27	Other financial derivatives	Other financial derivatives (e.g. power) not already included in lines 41.1 to 41.25. Where the nature of other derivatives results in an inability to provide this information prevents a full reconciliation with Table 1C, companies should provide a note explaining why.
41.28	Total financial derivatives	The sum of table 4I lines 8, 13, 18, 26 and 27. The 'Mark to Market' should equal the 'Financial instruments' totals from table 1C (the sum of lines 1C.5, 1C.10, 1C.16 and 1C.23).
41.29 to 41.56	Financial derivatives – (A) Super-senior swaps with breaks or accretion paydowns	The line definitions for the 28 rows from 41.29 to 41.56 are exactly the same as for lines 41.1 to 41.28 but show figures only for 'Category A Financial Derivatives – Super-senior swaps with breaks or accretion paydowns'.
41.57 to 41.84	Financial derivatives – (B) Pari-passu swaps with breaks or accretion paydowns	The line definitions for the 28 rows from 41.57 to 41.84 are exactly the same as for lines 41.1 to 41.28 but show figures only for 'Category B Financial Derivatives – Pari-passu swaps with breaks or accretion paydowns'.
4I.85 to 4I.112	Financial derivatives – (C) Super-senior swaps without breaks or accretion paydowns	The line definitions for the 28 rows from 41.85 to 41.112 are exactly the same as for lines 41.1 to 41.28 but show figures only for 'Category C Financial Derivatives – Super-senior swaps without breaks or accretion paydowns'.
4I.113 to 4I.140	Financial derivatives – (D) Other swaps	The line definitions for the 28 rows from 41.113 to 41.140 are exactly the same as for lines 41.1 to 41.28 but show figures only for 'Category D Financial Derivatives – Other swaps'.

Pro forma 4J: Base expenditure analysis for the 12 months ended 31 March 20xx – water resources and water network plus

4.33 Operating expenditure should be reported net of the principal use recharges between the price control units so that the costs at a price control level can be properly recorded.

Line	Title	Definition
4J.1		All energy costs, including the climate change levy and the carbon reduction commitment. Any cost savings from power generated internally should be netted off these costs.

Line	Title	Definition
4J.2	Income treated as negative expenditure	Income received from sales which are external to the appointed business and which directly relate to the water and wastewater processes. It should be input as a negative number. This will include; Electricity sales from sources such as Hydro, PV, wind and CHP to external parties.
		Electricity sales from back-up generators under arrangements such as the National Grid 'STOR', "frequency response" and "dynamic demand".
		Bio-methane gas sales to the National Grid. Sludge and sludge products such as cake, granules etc. to external parties.
4J.3	Bulk Supply/Bulk discharge	Total payments for bulk imports/exports. Where a company jointly owns a supply, the costs associated with it should not be reported here but in the appropriate cost line.
4J.4	Renewals expensed in year (Infrastructure)	Infrastructure renewals which are expensed rather than capitalised in the statutory accounts. 'Renewals' are generally planned activities to replace significant lengths of pipework or parts of an asset. These are targeted at improving network performance or solving ongoing problems and restores an asset to full capability.
4J.5	Renewals expensed in year (Non- Infrastructure)	Non-infrastructure renewals which are expensed rather than capitalised in the statutory accounts. 'Renewals' are generally planned activities targeted at improving network performance or solving ongoing problems and restores an asset to full capability.
4J.6	Other operating expenditure	Other operating costs not covered by 4J.4 and 4J.5. This should exclude finance charges associated with operating leases.
4J.7	Local authority and Cumulo rates	The cost of local authority rates. This should include both the local authority rates, cumulo rates and sewerage site rates (where appropriate).
4J.8	Canal & River Trust abstraction charges/ discharge consents	Costs associated with the Canal & River Trust service charges and discharge consents.
4J.9	EA / NRW abstraction charges/ discharge consents	Costs associated with Environment Agency / Natural Resources Wales service charges/ discharge consents.
4J.10	Other abstraction charges/ discharge consents	Costs associated with Other service charges/ discharge consents.
4J.11	Costs associated with Traffic Management Act	Costs directly related to permit schemes made pursuant to the Traffic Management Act excluding penalties or fines incurred by the company
4J.12	Costs associated with lane rental schemes	Costs directly associated with lane rental schemes excluding penalties or fines incurred by the company.
4J.13	Statutory water softening	Costs associated with statutory requirements for the softening of water as directed by the relevant legislation.
4J.14	Total base operating expenditure	The sum of lines 4J.1 to 4J.13.

Line	Title	Definition
4J.15	Maintaining the long term capability of the assets – infra	Capital expenditure on infrastructure assets excluding third party capex to maintain the long term capability of assets and to deliver base levels of service. Where projects have drivers both of enhancement and capital maintenance, companies should apply a method of proportional allocation to allocate costs between enhancement and capital maintenance.
4J.16	Maintaining the long term capability of the assets – non-infra	Capital expenditure on non-infrastructure assets excluding third party capex to maintain the long term capability of assets and to deliver base levels of service. Where projects have drivers both of enhancement and capital maintenance, companies should apply a method of proportional allocation to allocate costs between enhancement and capital maintenance.
4J.17	Total base capital expenditure	The sum of lines 4J.15 and 4J.16.
4J.18	Projects incurring costs associated with Traffic Management Act	The number of jobs that required a permit for which the costs that have been reported in 4J.11 have been incurred.

Pro forma 4K: Base expenditure analysis for the 12 months ended 31 March 20xx – wholesale wastewater

4.34 Operating expenditure should be reported **net of the principal use recharges** between the price control units so that the costs at a price control level can be properly recorded.

Line	Title	Definition
4K.1	Power	All energy costs, including the climate change levy and the carbon reduction commitment. Any cost savings from power generated internally should be netted off these costs.
4K.2	Income treated as negative expenditure	Income received from sales which are external to the appointed business and which directly relate to the water and wastewater processes. It should be input as a negative number. This will include;
		Electricity sales from sources such as Hydro, PV, wind and CHP to external parties.
		Electricity sales from back-up generators under arrangements such as the National Grid 'STOR', "frequency response" and "dynamic demand".
		Bio-methane gas sales to the National Grid.
		Sludge and sludge products such as cake, granules etc. to external parties.
4K.3	Bulk Supply/Bulk discharge	Total payments for bulk imports/exports. Where a company jointly owns a supply, the costs associated with it should not be reported here but in the appropriate cost line.

Line	Title	Definition
4K.4	Renewals expensed in year (Infrastructure)	Infrastructure renewals which are expensed rather than capitalised in the statutory accounts. 'Renewals' are generally planned activities to replace significant lengths of pipework or parts of an asset. These are targeted at improving network performance or solving ongoing problems and restores an asset to full capability.
4K.5	Renewals expensed in year (Non- Infrastructure)	Non-infrastructure renewals which are expensed rather than capitalised in the statutory accounts. 'Renewals' are generally planned activities targeted at improving network performance or solving ongoing problems and restores an asset to full capability.
4K.6	Other operating expenditure	Other operating costs not covered by 4K.4 and 4K.5. This should exclude finance charges associated with operating leases.
4K.7	Local authority and Cumulo rates	The cost of local authority rates. This should include both the local authority rates, cumulo rates and sewerage site rates (where appropriate).
4K.8	Canal & River Trust abstraction charges/ discharge consents	Costs associated with the Canal & River Trust service charges and discharge consents.
4K.9	EA / NRW abstraction charges/ discharge consents	Costs associated with Environment Agency / Natural Resources Wales service charges/ discharge consents.
4K.10	Other abstraction charges/ discharge consents	Costs associated with Other service charges/ discharge consents.
4K.11	Costs associated with Traffic Management Act	Costs directly related to permit schemes made pursuant to the Traffic Management Act excluding penalties or fines incurred by the company.
4K.12	Costs associated with lane rental schemes	Costs directly associated with lane rental schemes excluding penalties or fines incurred by the company.
4K.13	Costs associated with Industrial emissions directive	Costs associated with Industrial emissions directive.
4K.14	Total base operating expenditure	The sum of lines 4K.1 to 4K.13.
4K.15	Maintaining the long term capability of the assets – infra	Capital expenditure on infrastructure assets excluding third party capex to maintain the long term capability of assets and to deliver base levels of service. Where projects have drivers both of enhancement and capital maintenance, companies should apply a method of proportional allocation to allocate costs between enhancement and capital maintenance.
4K.16	Maintaining the long term capability of the assets – non-infra	Capital expenditure on non-infrastructure assets excluding third party capex to maintain the long term capability of assets and to deliver base levels of service. Where projects have drivers both of enhancement and capital maintenance, companies should apply a method of proportional allocation to allocate costs between enhancement and capital maintenance.
4K.17	Total base capital expenditure	The sum of lines 4K.15 and 4K.16.
4K.18	Projects incurring costs associated with Traffic Management Act	The number of jobs that required a permit for which the costs that have been reported in 4K.11 have been incurred.

RAG 4.11 – Guideline for the table definitions	s in the annual performance report
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Line	Title	Definition
4K.19	Power	All energy costs, including the climate change levy and the carbon reduction commitment. Any cost savings from power generated internally should be netted off these costs.
		This line is to be shadow reported for the remainder of the 2020- 25 period. This should include the cost to wastewater network plus of purchasing energy from bioresources, as set out in our guidance for the allocation of revenues / costs associated with energy generation in the bioresources control in RAG 2.
4K.20	Income treated as negative expenditure	 Income received from sales which are external to the appointed business and which directly relate to the water and wastewater processes. It should be input as a negative number. This will include; Electricity sales from sources such as Hydro, PV, wind and CHP to external parties. Electricity sales from back-up generators under arrangements such as the National Grid 'STOR', "frequency response" and "dynamic demand". Bio-methane gas sales to the National Grid. Sludge and sludge products such as cake, granules etc. to external parties. This line is to be shadow reported for the remainder of the 2020-25 period. This should include the income received by bioresources due to a sale of energy to wastewater network plus,
		This line is to be shadow reported for the remainder of the 202 25 period. This should include the income received by

Pro forma 4L: Enhancement expenditure for the 12 months ended 31st March 20xx – water resources and water network+

- 4.35 Addressing low pressure is not included as only a very limited number of companies have investment in this area. Where a company does have continuing investment, it should make use of the freeform lines at the foot of this table.
- 4.36 Expenditure included in third party services in table 4D should not be included in this table.

Line	Title	Definition
4L.1- 4L.3		Expenditure to deliver projects required to deal with the environmental impact of water abstraction during the report year (Habitats Directive, SSSI, NERC, BAPs).

Line	Title	Definition
4L.4- 4L.6	Eels Regulations (measures at intakes)	Expenditure on quality enhancement schemes listed in the NEP (or WINEP) either to improve intakes to prevent the entrainment of fish, provide or alter eel or alter fish passes or take alternative measures to meet the requirements of the Eels (England and Wales) Regulations 2009, or carry out investigations required to confirm the level of entrainment and/or the appropriate technical solution.
4L.7- 4L.9	Invasive non-native species	Expenditure required to deal with invasive non-native species.
4L.10- 4L.12	Drinking Water Protected Areas (schemes)	Expenditure on schemes to either avoid additional treatment or reduce current treatment (surface and groundwaters) and is associated with Drinking Water Protected Areas under Article 7 of the Water Framework Directive.
4L.13- 4L.15	Water Framework Directive measures	Expenditure on Water Framework Directive – driven measures to improve, protect or ensure no deterioration in the status or potential of surface water or groundwater where the measures arise from PR19 investigations or sustainable abstraction work.
4L.16- 4L.18	Investigations	Expenditure on environmental investigations and options appraisals listed in the NEP, except where line definitions require costs to be reported elsewhere in this table for AMP7.
4L.19	Total environmental programme expenditure	The sum of lines 4L.3, 4L.6, 4L.9, 4L.12, 4L.15 and 4L.18.
4L.20- 4L.22	Supply-side improvements delivering benefits in 2020-2025	Expenditure that enhances the supply-demand balance in 2020-25. Includes expenditure associated with schemes delivering supply-side (resource and production options) enhancements in 2020-25. The benefits (MI/d) associated with this expenditure are reported in table 6F.
4L.23- 4L.25	Demand-side improvements delivering benefits in 2020-2025 (excluding leakage and metering)	Expenditure that enhances the supply-demand balance in 2020-25. Includes expenditure associated with schemes delivering demand-side (water efficiency options) enhancements in 2020-25. This excludes benefits from leakage and metering activities. The benefits (MI/d) associated with this expenditure are reported in table 6F.
4L.26- 4L.28	Leakage improvements delivering benefits in 2020-2025	Expenditure that enhances the supply-demand balance in 2020-25. Includes expenditure associated with schemes delivering leakage enhancements in 2020-25. This line should only be completed by companies who were allocated leakage enhancement expenditure in the PR19 final determinations. For these companies this will form part of the 'Total leakage activity' expenditure reported in line 6D.22. For companies who were not allocated leakage enhancement expenditure in the PR19 final determinations all expenditure associated with leakage is reported in line 6D.22.
4L.29- 4L.31	Internal interconnectors delivering benefits in 2020-2025	Expenditure that enhances the supply-demand balance in 2020-25. Includes expenditure associated with inter-zonal and intra-zonal connections delivering interconnectivity in 2020-25.
4L.32- 4L.34	Supply demand balance improvements delivering benefits starting from 2026	Expenditure that enhances the supply-demand balance in the longer term (providing benefits from 2026 onwards). Includes expenditure associated with inter-zonal and intra-zonal connections delivering interconnectivity benefits from 2026.

Line	Title	Definition
4L.35- 4L.37	Strategic regional water resources	Expenditure associated with the strategic regional water resource solutions programme.
4L.38	Total supply demand expenditure	The sum of lines 4L.22, 4L.25, 4L. 28, 4L.31, 4L.34 and 4L.37.
4L.39- 4L.41	New meters requested by existing customers (optants)	Expenditure related to metering (excluding cost of providing metering to new service connections) for provision of meters requested by existing customers (optants). This does not include costs related to smart meter infrastructure assets such as telemetry. Costs associated with meter readings for retail activities are reported in line 2C.4.
4L.42- 4L.44	New meters introduced by companies for existing customers	Expenditure related to the provision of meters introduced by companies (excluding cost of providing metering to new service connections), irrespective of whether these meters are used for charging. This does not include costs related to smart meter infrastructure assets such as telemetry. Costs associated with meter readings for retail activities are reported in line 2C.4.
4L.45- 4L.47	New meters for existing customers - business	Expenditure related to the provision of meters to businesses and other non-household customers (excluding cost of providing metering to new service connections). This does not include costs related to smart meter infrastructure assets such as telemetry. Costs associated with meter readings for retail activities are reported in line 2C.4.
4L.48- 4L.50	Replacement of existing basic meters with AMR or AMI meters for residential customers	The enhancement element of the expenditure relating to the activity of upgrading to/or replacing existing residential customer basic meter installations with/to AMR or AMI meters. This does not include costs related to smart meter infrastructure assets such as telemetry. This line should only be completed by companies who were allocated enhancement expenditure to replace basic meters with smart meters in the PR19 final determinations or as part of our green economic recovery final decisions.
4L.51- 4L.53	Replacement of existing AMR meters with AMI meters for residential customers	The enhancement element of the expenditure relating to the activity of upgrading to/or replacing existing residential customer AMR meter installations with/to AMI meters. This does not include costs related to smart meter infrastructure assets such as telemetry. This line should only be completed by companies who were allocated enhancement expenditure to replace basic meters with smart meters in the PR19 final determinations or as part of our green economic recovery final decisions.
4L.54- 4L.56	Replacement of existing basic meters with AMR or AMI meters for business customers	The enhancement element of the expenditure relating to the activity of upgrading to/or replacing existing business customer basic meter installations with/to AMR or AMI meters. This does not include costs related to smart meter infrastructure assets such as telemetry. This line should only be completed by companies who were allocated enhancement expenditure to replace basic meters with smart meters in the PR19 final determinations or as part of our green economic recovery final decisions.

Line	Title	Definition
4L.57- 4L.59	Replacement of existing AMR meters with AMI meters for business customers	The enhancement element of the expenditure relating to the activity of upgrading to/or replacing existing business customer AMR meter installations with/to AMI meters. This does not include costs related to smart meter infrastructure assets such as telemetry. This line should only be completed by companies who were allocated enhancement expenditure to replace basic meters with smart meters in the PR19 final determinations or as part of our green economic recovery final decisions.
4L.60- 4L.62	Smart metering infrastructure	Expenditure related to the provision of infrastructure such as telemetry to support the residential and business smart meter network.
4L.63	Total metering expenditure	The sum of lines 4L.41, 4L.44, 4L.47, 4L.50, 4L.53, 4L.56, 4L.59 and 4L.62.
4L.64- 4L.66	Improvements to taste / odour / colour	Expenditure to deliver improvements to consumer acceptability of the drinking water (relating to colour, taste and odour).
4L.67- 4L.69	Addressing raw water deterioration (grey solutions)	Expenditure on grey solutions to address raw water deterioration (THM, nitrates, Crypto, pesticides, others).
4L.70- 4L.72	Addressing raw water deterioration (green solutions)	Expenditure on green solutions to address raw water deterioration (THM, nitrates, Crypto, pesticides, others).
4L.73- 4L.75	Addressing raw water deterioration (total)	Total expenditure of grey and green solutions to address raw water deterioration (THM, nitrates, Crypto, pesticides, others).
4L.76- 4L.78	Improvements to river flows	Expenditure relating to reducing abstraction licenses (unless captured elsewhere in this table, principally 4L.1-3 or 4L.29-31).
4L.79- 4L.81	Enhancing resilience to low probability high consequence events	Expenditure to address low probability – high consequence events (including those related to the National Flood Resilience Review), where the failure and consequence to services for customers or the environment are beyond management control.
4L.82- 4L.84	Conditioning water to reduce plumbosolvency	Expenditure to deal with conditioning of water entering the distribution system.
4L.85- 4L.87	Lead communication pipes replaced or relined for water quality	Expenditure to replace or reline communication pipes for water quality reasons.
4L.88- 4L.90	Other lead reduction related activity	Expenditure on other lead reduction related activities. This includes any investigation costs and other costs not directly associated with conditioning water or replacement or relining of communication pipes.
4L.91- 4L.93	Meeting lead standards (total)	Total expenditure to meet lead standards. This includes conditioning water, lead communication pipe replacement or relining for water quality reasons and other lead reduction related activity.

Line	Title	Definition
4L.94- 4L.96	Security – SEMD	Expenditure to comply with the requirements of Security and Emergency Measures Direction (SEMD). To include schemes to protect CNI and NI assets and assessments of further improvements to comply with SEMD Direction 1998, and emergency response and resilience requirements. Defra's Protective Security Guidance.
4L.97- 4L.99	Security – Non-SEMD	Expenditure on schemes driven by other (ie non-SEMD) security requirements, for example to improve cyber security or to enhance the security of network and information systems.
4L.100- 4L.109	Additional lines 1-5	Other expenditure by purpose. Where possible companies should maintain consistency with corresponding lines in previous data submissions when using these lines.
4L.110	Total other enhancement expenditure	The sum of lines 4L.66, 4L.75, 4L.78, 4L.81, 4L.93, 4L.96, 4L.99, and 4L.100-109.
4L.111	Total enhancement expenditure – capex	The sum of lines 1, 4, 7, 10, 13, 16, 20, 23, 26, 29, 32, 35, 39, 42, 45, 48, 51, 54, 57, 60, 64, 73, 76, 79, ,91, 94, 97, 100, 102, 104, 106 and 108. Total enhancement capital expenditure should equal line 4D.9
4L.112	Total enhancement expenditure – opex	The sum of lines 2, 5, 8, 11, 14, 17, 21, 24, 27, 30, 33, 36, 40, 43, 46, 49, 52, 55, 58, 61, 65, 74, 77, 80, 92, 95, 98, 101, 103, 105, 107, 109. Total enhancement operating expenditure should equal line 4D.2.
4L.113	Total enhancement expenditure	The sum of lines 4L.111 and 4L.112.

4.37 Where a quality enhancement scheme (or the proportionally allocated component of a quality enhancement scheme) has more than one cost driver, companies should allocate the expenditure attributable to the primary driver to the relevant line. Any net additional cost for delivering any further drivers should be included in the relevant line.

Cumulative expenditure on schemes completed in the report year

4.38 Companies should report schemes as completed when they come into beneficial use which may not always be the same as the financial close of a scheme. If companies incur additional expenditure on schemes already reported as completed (for example, additional snagging costs or landscaping), the expenditure should be reported in the relevant line in the report year but not restated in the cumulative expenditure on schemes completed in the report year columns. Appendix 4 contains guidance on reporting cumulative costs on schemes completed in the year.

Cumulative expenditure and cumulative allowed expenditure on all schemes to reporting year end

- 4.39 These columns compare actual expenditure against allowed expenditure at PR19.
- 4.40 Costs reported should be in report year prices. Costs from previous years should be inflated using financial-year average CPIH.

Pro forma 4M: Enhancement expenditure for the 12 months ended 31st March 20xx - wastewater network+ and bioresources

4.41 This pro forma does not include a number of standard lines included for AMP6, for example NEP – monitoring of pass forward flows at CSOs. The lines have been removed because we do not expect investment in these areas in the 2020-25 price control period, or because only a very limited number of companies have investment in these areas. Where a company does have continuing investment it should make use of the freeform lines at the foot of the table.

Line	Title	Definition
4M.1- 4M.3	Conservation drivers	Expenditure on the primary cost driver of quality enhancement schemes listed in the WINEP / NEP where the objective of the primary driver is to meet the requirements of conservation drivers (the Habitats and Birds Directives, the CRoW Act, the Marine and Coastal Access Act, invasive non-native species and the UK Biodiversity Action Plan) over and above that on schemes and investigations for which expenditure is required to be reported elsewhere in this table).
4M.4- 4M.6	Event Duration Monitoring at intermittent discharges	Expenditure on quality enhancement schemes listed in the WINEP / NEP to provide event and duration monitoring of intermittent discharges. For AMP7 these are the outputs required by the Environment Agency or Natural Resources Wales under the driver codes U_MON1, U_MON2, U_MON3, U_EDMW, SW_MON and BW_MON.
4M.7- 4M.9	Flow monitoring at sewage treatment works	Expenditure on quality enhancement schemes listed in the WINEP / NEP to provide flow monitoring at sewage treatment works (AMP7 driver codes: U_MON4, U_MON5).
4M.10- 4M.12	Schemes to increase flow to full treatment	Expenditure on quality enhancement schemes listed in the WINEP / NEP to increase the flow to full treatment to 3PG+I+3E (AMP7 driver code: U_IMP5).
4M.13- 4M.15	Schemes to increase storm tank capacity	Expenditure on quality enhancement schemes listed in the WINEP / NEP to increase the storm tank capacity at sewage treatment works to 68 l/hd or to 2 hours retention at max flow into the tanks (AMP7 driver code: U_IMP6).

4.42 Expenditure included within third party services in table 4E should not be included in this table.

Line	Title	Definition
4M.16- 4M.18	Schemes to provide additional effective storage at sewage treatment works through green infrastructure	Expenditure on quality enhancement schemes listed in the WINEP / NEP to increase the effective storage at sewage treatment works through the use of green (nature-based) solutions
4M.19- 4M.21	Storage in the network (at CSOs etc) to reduce spill frequency (grey infrastructure)	Expenditure on quality enhancement schemes listed in the WINEP / NEP to increase storage in the network (at CSOs etc) to reduce spill frequency, delivered through grey infrastructure.
4M.22- 4M.24	Effective storage in the network (at CSOs etc) to reduce spill frequency (green infrastructure)	Expenditure on quality enhancement schemes listed in the WINEP / NEP to increase storage effective storage in the network (at CSOs etc) to reduce spill frequency, delivered through green infrastructure.
4M.25	Total for storage schemes in the network to reduce spill frequency at CSOs etc (grey + green infrastructure)	Total expenditure (totex) on schemes listed in the WINEP / NEP to meet new or tightened spill frequency objectives at network assets, eg CSOs, by the provision of new or additional storage volume (grey infrastructure) and/or additional effective storage through green (nature-based) schemes. This is the sum of lines 4M.21 and 4M.24.
4M.26- 4M.28	Chemical removal schemes	Expenditure on improvements listed in the WINEP / NEP as part of the national 'Pathway to good measures for chemicals' programme or to prevent deterioration in chemical status or to achieve standstill limits for chemicals (AMP7 driver codes: WFD_IMP_CHEM, WFD_NDLS, some WFD_ND and potentially L_IMP and LWFD_IMP).
4M.29- 4M.31	Chemicals monitoring / investigations / options appraisals	Expenditure on monitoring, investigations, feasibility studies and improvements listed in the WINEP / NEP as part of the national Chemicals Investigation Programme (AMP7 driver codes: WFD_INV_CHEM1-9, WFD_MONCHEM)
4M.32- 4M.34	Nitrogen removal	Expenditure on the primary cost driver of quality enhancement schemes listed in the WINEP / NEP where the objective of the primary cost driver is to meet new or tightened consent conditions for nitrogen.
4M.35- 4M.37	Phosphorus removal	Expenditure on the primary cost driver of quality enhancement schemes listed in the WINEP / NEP where the objective of the primary cost driver is to meet new or tightened consent conditions for phosphorus.
4M.38- 4M.40	Reduction of sanitary parameters	Expenditure on the primary cost driver of quality enhancement schemes listed in the WINEP / NEP where the objective of the primary cost driver is to meet new or tightened consent conditions for one or more of the sanitary parameters unless the objective is associated with a specific cost driver code for which there is a dedicated line elsewhere in this table. In such cases costs should be excluded from this line and entered in the line for the relevant cost driver code.

Line	Title	Definition
4M.41- 4M.43	UV disinfection (or similar)	Expenditure on the primary cost driver of quality enhancement schemes listed in the WINEP / NEP where the objective of the primary cost driver is to meet new or tightened consent conditions for microbiological parameters to meet the requirements of the EU Shellfish Waters or revised Bathing Water Directives. Such schemes will typically involve UV disinfection but may involve alternative technologies eg membrane filtration, ozone etc.
4M.44- 4M.46	Investigations	Expenditure on investigations listed in the WINEP / NEP over and above that on investigations for which expenditure is required to be reported elsewhere in this table (principally 4M.29-31).
4M.47	Total environmental programme expenditure	The sum of lines 4M.3, 4M.6, 4M.9, 4M.12, 4M.15, 4M.18, 4M.25, 4M.28, 4M.31, 4M.34, 4M.37,4M.40, 4M.43 and 4M.46.
4M.48- 4M.50	Growth at sewage treatment works (excluding sludge treatment)	Expenditure associated with meeting or offsetting changes in demand from new and existing customers at sewage treatment works but excluding sludge treatment centres. Expenditure at sludge treatment centres should be reported in 4M.60-62.
4M.51- 4M.53	Reducing flooding risk for properties	Expenditure for the purpose of enhancing the public sewerage system to reduce the risk to properties and external areas of flooding from sewers. Exclude maintaining the long-term capability of the assets – infra that should be reported in 4K.15 and expenditure associated with the provision of new sewers for new development and such other on-site expenditure required in consequence of the new development that should be reported in 40.1 and 40.2.
4M.54- 4M.56	First time sewerage (s101A)	Expenditure for new and additional sewage treatment and sewerage assets for first time sewerage schemes to meet the duty under s101A of the Water Industry Act 1991.
4M.57- 4M.59	Sludge enhancement (quality)	Expenditure on sludge treatment and disposal assets and associated biogas treatment for meeting new environmental obligations listed in the WINEP / NEP. This is for both infrastructure and non-infrastructure assets.
4M.60- 4M.62	Sludge enhancement (growth)	Expenditure on sludge treatment and disposal assets and associated biogas treatment for providing new capacity for growth. This is for both infrastructure and non- infrastructure assets.
4M.63- 4M.65	Odour	Expenditure on schemes where the primary objective is to effect a step change improvement in odour control above base standards.
4M.66- 4M.68	Enhancing resilience to low probability high consequence events	Expenditure to address low probability – high consequence events (including those related to the National Flood Resilience Review), where the failure and consequence to services for customers or the environment are beyond management control.
4M.69- 4M.71	Security – SEMD	Expenditure to protect CNI and NI assets and on assessments of potential further improvements to comply with the Security and Emergency Measures Direction 1998 and Defra's Protective Security Guidance.
4M.72- 4M.74	Security – Non-SEMD	Expenditure on schemes driven by other (ie non-SEMD) security requirements, for example to improve cyber security or to enhance the security of network and information systems.

Line	Title	Definition
4M.75- 4M.84	Additional lines 1-5	Other expenditure by purpose Where possible companies should maintain consistency with corresponding lines in previous data submissions when using these lines.
4M.85	Total other enhancement expenditure	The sum of lines 4M.50, 4M.53, 4M.56, 4M.59, 4M.62, 4M.65, 4M.68, 4M.71, 4M.74 and 4M.75-84.
4M.86	Total enhancement expenditure - capex	The sum of lines 1, 4, 7, 10, 13, 16, 19, 22, 26, 29, 32, 35, 38, 41, 44, 48, 51, 54, 57, 60, 63, 66, 69, 72, 75, 77, 79, 81 and 83. Total enhancement capital expenditure in line 86 should equal line 4E.9.
4M.87	Total enhancement expenditure - opex	The sum of lines 2, 5, 8, 11, 14, 17, 20, 23, 27, 30, 33, 36, 39, 42, 45, 49, 52, 55, 58, 61, 64, 67, 70, 73, 76, 78, 80, 82 and 84. Total enhancement operating expenditure in line 87 should equal line 4E.2.
4M.88	Total enhancement expenditure	The sum of lines 4M.86 and 4M.87.

Cumulative expenditure on schemes completed in the report year

4.43 Companies should report schemes as completed when they come into beneficial use which may not always be the same as the financial close of a scheme. If companies incur additional expenditure on schemes already reported as completed (for example, additional snagging costs or landscaping), the expenditure should be reported in the relevant line in the report year but not restated in the cumulative expenditure on schemes completed in the report year columns. Appendix 4 contains guidance on reporting cumulative costs on schemes completed in the year.

Cumulative expenditure and cumulative allowed expenditure on all schemes to reporting year end

- 4.44 These columns compare actual expenditure against allowed expenditure at PR19. Companies should report costs on all schemes regardless of whether they have been completed in the report year or are due to complete in the future. If schemes have already been completed but have incurred additional expenditure, then only that additional expenditure should be added to the cumulative total in the report year.
- 4.45 Costs reported should be in report year prices. Costs from previous years should be inflated using financial-year average CPIH.

Pro forma 4N: Developer services expenditure for the 12 months ended 31st March 20xx – water resources and water network+ (price control)

Line	Title	Definition
4N.1	New connections	Expenditure related to the connection of a single new property (including the cost of a meter, communication pipe and boundary stop tap valve). Expenditure reported in this line should be the same categories of
		expenditure that was used to calculate connection charges for English companies.
4N.2	Requisition mains	Expenditure related to the provision of new requisition mains (eg the cost of work to lay new mains on-site and to connect to the existing network in the immediate vicinity of the development). Expenditure reported in this line should be the same categories of expenditure that was used to calculate requisition charges for English companies.
4N.3	Network reinforcement	Expenditure related to the provision or upgrading of network assets (both above and below ground) such as water mains, tanks, service reservoirs, to provide for new customers with no net deterioration of existing levels of service. This expenditure relates solely to network reinforcement works that are needed on the existing and new network assets beyond the nearest practicable point where the connection to the network has, or will been made. Expenditure reported in this line should be the same categories of expenditure that was used to calculate infrastructure charges for English companies.
4N.4	s185 diversions	Expenditure related to the diversion of mains under the provision of section 185 of the Water Industry Act 1991.
4N.5	Other price controlled activities	Expenditure related to other activities provided to developers where the revenues are part of the price control as defined by Appendix 1 of RAG4.
4N.6	Total developer services expenditure	The sum of lines 4N.1 to 4N.5.

Pro forma 40: Developer services expenditure for the 12 months ended 31st March 20xx - wastewater network+ (price control)

Line	Title	Definition
40.1, 40.7	New connections	Expenditure related to the connection of new properties to the existing sewer network in the immediate vicinity of the development (eg cost of laying lateral drains). Expenditure reported in this line should be the same categories of expenditure that was used to calculate a water or sewerage undertaker's receipts for on-site work for English companies. Expenditure reported in 40.2 and 40.8 should not be repeated here.

Line	Title	Definition
40.2, 40.8	Requisition sewers	Expenditure related to the provision of new requisition sewer (eg the cost of work to lay new sewer on-site and to connect to the existing network in the immediate vicinity of the development). Expenditure reported in this line should be the same categories of expenditure that was used to calculate a water or sewerage undertaker's receipts for on-site work for English companies. Expenditure reported in 40.1 and 40.7 should not be repeated here.
40.3, 40.9	Network reinforcement	Expenditure related to the provision or upgrading of network assets (both above and below ground) such as sewers and pumping stations, to provide for new customers with no net deterioration of existing levels of service. This expenditure relates solely to network reinforcement works that are needed on the existing and new network assets beyond the nearest practicable point where the connection to the network has or will been made. Expenditure reported in this line should be the same categories of expenditure that was used to calculate infrastructure charges for English companies.
40.4, 40.10	s185 diversions	Expenditure related to the diversion of sewers under the provision of section 185 of the Water Industry Act 1991.
40.5, 40.11	Other price controlled activities	Expenditure related to other activities provided to developers where the revenues are part of the price control as defined by Appendix 1 of RAG4.
40.6	Total developer services expenditure - capex	The sum of lines 40.1 to 40.5.
40.12	Total developer services expenditure - opex	The sum of lines 40.7 to 40.11.
40.13	Total developer services expenditure	The sum of lines 40.6 and 40.12.

Pro forma 4P: Developer services non-price control expenditure for the 12 months ended 31 March 20xx

Line	Title	Definition
4P.1	Capex associated with NSWRA diversions	Capex incurred in relation to the alteration or removal of any relevant pipe (as defined in section 158 of the Water Industry Act 1991) or other apparatus that the Appointee is required to carry out under the New Roads and Streets Works Act 1991.
4P.2	Capex associated with other non- price control diversions	Capex incurred in relation to the alteration or removal of any relevant pipe (as defined in section 158 of the Water Industry Act 1991) or other apparatus that the Appointee is required to carry out under a statutory provision except a provision of the Water Industry Act 1991 or a provision of the New Roads and Streets Works Act 1991.
4P.3	Other developer services non-price control capex	Any capex on services for developers which are not price control activities or diversions.

Line	Title	Definition
4P.4	Developer services non-price control capex	The sum of lines 4P.1, 4P.2 and 4P.3.
4P.5	Opex associated with NSWRA diversions	Opex incurred in relation to the alteration or removal of any relevant pipe (as defined in section 158 of the Water Industry Act 1991) or other apparatus that the Appointee is required to carry out under the New Roads and Streets Works Act 1991.
4P.6	Opex associated with other non- price control diversions	Opex incurred in relation to the alteration or removal of any relevant pipe (as defined in section 158 of the Water Industry Act 1991) or other apparatus that the Appointee is required to carry out under a statutory provision except a provision of the Water Industry Act 1991 or a provision of the New Roads and Streets Works Act 1991.
4P.7	Other developer services non-price control opex	Any opex on services for developers which are not price control activities or diversions.
4P.8	Developer services non-price control opex	The sum of lines 4P.5, 4P.6 and 4P.7.
4P.9	Costs associated with NSWRA diversions	Costs incurred in relation to the alteration or removal of any relevant pipe (as defined in section 158 of the Water Industry Act 1991) or other apparatus that the Appointee is required to carry out under the New Roads and Streets Works Act 1991. The sum of lines 4P.1 and 4P.5.
4P.10	Costs associated with other non- price control diversions	Costs incurred in relation to the alteration or removal of any relevant pipe (as defined in section 158 of the Water Industry Act 1991) or other apparatus that the Appointee is required to carry out under a statutory provision except a provision of the Water Industry Act 1991 or a provision of the New Roads and Streets Works Act 1991. The sum of lines 4P.2 and 4P.6.
4P.11	Other developer services non-price control totex	Any expenditure on services for developers which are not price control activities or diversions. The sum of lines 4P.3 and 4P.7
4P.12	Developer services non-price control totex	The sum of lines 4P.9, 4P.10 and 4P.11.

Pro forma 4Q: Developer services - New connections, properties and mains

4.46 This table relates to developer services and the figures on new connections and new properties here need to be reported in this context. We are also asking for information on the level of self-lay (SLP) and NAV activity in the developer services market.

Line	Title	Definition
4Q.1	New connections (residential – excluding NAVs)	Number of new service connections between a property (or properties) and a new/existing water main/sewer during the reporting period, counted at time of the connection being made. This relates to residential properties and excludes connections that are being served by NAVs. It also excludes connections between an existing main and a new requisition main. The figure here will not necessarily be the same as 4Q.5, since one new service connection could serve multiple properties, or a new connection could be required in an existing property.
4Q.2	New connections (business – excluding NAVs)	This relates to new connections (as defined in 4Q.1) in respect of non-household properties.
4Q.3	Total new connections served by incumbent	The sum of lines 4Q.1 and 4Q.2.
4Q.4	New connections – SLPs	This line records SLP activity. Number of new connections served by the incumbent where SLPs do the tapping. This figure is part of 4Q.1/4Q.2.
4Q.5	New properties (residential – excluding NAVs)	Number of new residential properties added to the network, excluding those that are being served by NAVs. This relates to the new connections made in the year, not new billed properties, and should be counted at the time the new service connection is completed.
4Q.6	New properties (business – excluding NAVs)	This relates to new properties (as defined in 4Q.5) for non-household use.
4Q.7	Total new properties served by incumbent	The sum of lines 4Q.5 and 4Q.6.
4Q.8	New residential properties served by NAVs	Number of new residential properties on NAV sites with a bulk supply from the incumbent. To be estimated if not known – noted in the annual return.
4Q.9	New business properties served by NAVs	Number of non-household properties on NAV sites with a bulk supply form the incumbent. To be estimated if not known – noted in the annual return.
4Q.10	Total new properties served by NAVs	The sum of lines 4Q.8 and 4Q.9.
4Q.11	Total new properties	The sum of lines 4Q.7 and 4Q.10.
4Q.12	New properties – SLP connections	This line records SLP activity. Number of new properties served by the incumbent where the service connections were completed by SLPs, as described in 4Q.4. This figure is part of 4Q.5/4Q.6.
4Q.13	Length of new mains (km) - requisitions	Total length (km) of new mains laid by the incumbent water company in report year for which the company levies requisition charges. This figure is part of 6C.4 - Total length of new potable mains.
4Q.14	Length of new mains (km) - SLPs	This line records SLP activity. Total length (km) of new mains laid by SLPs in report year, which the incumbent water company adopts. This figure is part of 6C.4 - Total length of new potable mains.

Pro forma 4R: Non-financial information – Properties, customers and population

- 4.47 Where the following definitions refer to 'residential' properties then this has the same meaning as 'households' as described in chapter 11. References to 'business' properties have the same meaning as 'non-households' in chapter 11.
- 4.48 When the following definitions refer to voids, these are defined as follows: void properties are properties, within the company's supply area, which are connected to the company's assets for either a water only service, a wastewater only service or both services but do not receive a charge, as there are no occupants. Additionally, a property connected for both services that is not occupied, only counts as one void property. Exclude properties that are not billed as it is uneconomic to do so.
- 4.49 For the avoidance of doubt this table is not just for water only connections but for all properties connected for water supply and therefore would include both water only and dual service properties.
- 4.50 For the avoidance of doubt 'properties', 'customer's' and 'population' supplied and billed by 'New appointments or variations (NAVs)' should not be included in this table.

Line	Title	Definition
4R.1	Residential water only customers	Average number of residential water only customers in the year. Reported in terms of unmeasured, measured and total customer numbers. Voids are excluded from these numbers and are reported as a separate total.
4R.2	Residential wastewater only customers	Average number of residential wastewater only customers in the year. Reported in terms of unmeasured, measured and total customer numbers. Voids are excluded from these numbers and are reported as a separate total.
4R.3	Residential water and wastewater customers	Average number of residential dual (water and wastewater) customers in the year. Reported in terms of unmeasured, measured and total customer numbers. Voids are excluded from these numbers and are reported as a separate total.
4R.4	Total residential customers	Average number of total residential customers in the year. Calculated as the sum of individual figures in lines 4R.1 to 4R.3.
4R.5	Business water only customers	Average number of business water only customers in the year. Reported in terms of unmeasured, measured and total customer numbers. Voids are excluded from these numbers and are reported as a separate total.
4R.6	Business wastewater only customers	Average number of business wastewater only customers in the year. Reported in terms of measured, unmeasured and total customer numbers. Voids are excluded from these numbers and are reported as a separate total.

Line	Title	Definition
4R.7	Business water and wastewater customers	Average number of business dual (water and wastewater) customers in the year. Reported in terms of unmeasured, measured and total customer numbers. Voids are excluded from these numbers and are reported as a separate total.
4R.8	Total business customers	Average number of total business customers in the year. Calculated as the sum of individual figures in lines 4R.5 to 4R.7.
4R.9	Total customers	Average number of total customers in the year (residential and business). Calculated as the sum of individual figures in lines 4R.4 and 4R.8.
4R.10	Residential properties billed	Average number of residential properties billed in the year within the undertaker's area. Reported in terms of unmeasured, measured and total property numbers. Excludes void properties. For wastewater measured properties, this includes residential properties billed for measured water supply where sewerage bills are based on value of water supplied.
		This line should be equivalent to the sum of measured, unmeasured and total numbers in 4R.1 and 4R.3 for properties receiving a water service, and equivalent to the sum of measured, unmeasured and total numbers in 4R.2 and 4R.3 for properties receiving a wastewater service.
4R.11	Residential void properties	Average number of residential properties within the undertaker's area in the year which are connected to the company's assets but do not receive a charge as there are no occupants. This should not include properties that do not receive a bill because it would be uneconomic to do so. This line should be equivalent to the sum of the numbers of voids in lines 4R.1 and 4R.3 for void properties connected for water services, and equivalent to the sum of the number of voids in lines 4R.2 and
4R.12	Total connected residential properties	4R.3 for void properties connected for a wastewater service. Average number of total residential properties connected within the undertaker's area in the year. This includes void properties and is calculated as the sum of the total property numbers in lines 4R.10 and 4R.11.
4R.13	Business properties billed	Average number of business properties billed in the year within the undertaker's area. Reported in terms of unmeasured, measured and total property numbers. Excludes void properties. For wastewater measured properties, trade effluent customers should be included. This line should be equivalent to the sum of measured, unmeasured and total numbers in lines 4R.5 and 4R.7 for properties receiving a water service, and equivalent to the sum of measured, unmeasured and total numbers in lines 4R.6 and 4R.7 for properties receiving a wastewater service.
4R.14	Business void properties	Average number of business properties within the undertaker's area in the year which are connected to the company's assets but do not receive a charge as there are no occupants. This should not include properties that do not receive a bill because it would be uneconomic to do so. This line should be equivalent to the sum of the numbers of voids in lines 4R.5 and 4R.7 for void properties connected for water services, and equivalent to the sum of the numbers of voids in lines 4R.6 and 4R.7 for void properties connected for a wastewater service.

Line	Title	Definition
4R.15	Total connected business properties	Average number of total business properties connected within the undertaker's area in the year. This includes void properties and is calculated as the sum of the total property numbers in lines 4R.13 and 4R.14.
4R.16	Total connected properties	Average number of total properties connected in the year (residential and business) within the undertaker's area in the year. This includes void properties and is calculated as the sum of the total properties in lines 4R.12 and 4R.15.
4R.17	Total new residential properties connected in year	Total number of new residential properties connected to a company's area of supply during the report year. This will cover the number of new residential properties added for each year that were previously not connected for water supply. Exclude separation of common services, or other reconnections. Reported in terms of unmeasured, measured and total billed property numbers. Numbers are reported for unmeasured and measured billed properties in terms of the type of meter installed at the property.
4R.18	Total number of new business properties connections	Total number of new business properties connected to a company's area of supply during the report year. This will cover the number of new residential properties added for each year that were previously not connected for water supply. Exclude separation of common services, or other reconnections. Reported in terms of unmeasured, measured and total billed property numbers. Numbers are reported for unmeasured and measured billed properties in terms of the type of meter installed at the property.
4R.19	Residential properties billed at year end	The total number of residential properties billed for water within the supply area at the end of the report year. Excludes void properties. Reported in terms of unmeasured, measured and total billed property numbers. Numbers are reported for unmeasured and measured billed properties in terms of the type of meter installed at the property.
4R.20	Residential properties unbilled at year end	The total number of residential properties remaining unbilled for water within the supply area at the end of the report year. Excludes void properties. Reported in terms of uneconomic to bill properties and properties identified as unbilled for reasons other than this. These properties are not required to be reported in terms of meter type. Where companies identify a property as uneconomic to bill they should provide further detail of their assessment approach in the accompanying narrative. Where properties are recorded as unbilled 'other' further explanation of the reasons for these properties remaining unbilled should be provided in the accompanying narrative. Examples of unbilled 'other' properties include unbilled new developments and properties that are unbilled due to dispute.
4R.21	Residential void properties at year end	The total number of residential properties within the undertaker's area in the year which are connected to the company's assets but do not receive a charge as there are no occupants. This should not include properties that do not receive a bill because it would be uneconomic to do so.

Line	Title	Definition
4R.22	Total connected residential properties at year end	The total number of residential properties connected to the water distribution system at the end of the report year. This includes void properties and unbilled properties and is calculated as the sum of the total properties in lines 4R.19, 4R.20 and 4R.21.
4R.23	Business properties billed at year end	The total number of business properties billed for water within the supply area at the end of the report year. Excludes void properties. Reported in terms of unmeasured, measured and total billed property numbers. Numbers are reported for unmeasured and measured billed properties in terms of the type of meter installed at the property.
4R.24	Business properties unbilled at year end	The total number of business properties remaining unbilled for water within the supply area at the end of the report year. Excludes void properties. Reported in terms of uneconomic to bill properties and properties identified as unbilled for reasons other than this. These properties are not required to be reported in terms of meter type. Where companies identify a property as uneconomic to bill they should provide further detail of their assessment approach in the accompanying narrative. Where properties are recorded as unbilled 'other' further explanation of the reasons for these properties remaining unbilled should be provided in the accompanying narrative. Examples of unbilled 'other' properties include unbilled new developments and properties that are unbilled due to dispute.
4R.25	Business void properties at year end	The total number of business properties within the undertaker's area in the year which are connected to the company's assets but do not receive a charge as there are no occupants. This should not include properties that do not receive a bill because it would be uneconomic to do so.
4R.26	Total connected business properties at year end	The total number of business properties connected to the water distribution system at the end of the report year. This includes void properties and unbilled properties and is calculated as the sum of the total properties in lines 4R.23, 4R.24 and 4R.25.
4R.27	Total connected properties at year end	The total number of residential and business properties connected to the water distribution system at the end of the report year. This includes void properties and is calculated as the sum of the total properties in lines 4R.22 and 4R.26
4R.28	Resident population	The annual average resident population served. This includes both households and businesses billed.
4R.29	Non-resident population (wastewater)	The annual average holiday and tourist population connected to the sewerage system. Do not include daily commuters or day visitors. Non-resident population should comprise holiday and tourist population. An acceptable method of estimation would be to obtain from tourist boards estimates of the number of bed spaces available for non-residents. Except where there is firm evidence to the contrary, companies should assume a two-thirds occupancy rate for four months in the year. Non-resident population should exclude day visitors and daily commuters.

Line	Title	Definition
4R.30	Household population	The household population used to derive the common performance commitment for PCC reported in 3F.4. Reported in terms of resident and non-resident population if the reporting company uses both in the derivation of PCC. If non-
		resident population is not used in the calculation, then no figure should be recorded. Reported following the <u>'Reporting guidance - per capita</u> <u>consumption'</u> .
4R.31	Household measured population (water only)	Measured population total used to derive the measured PCC value in 6D.24.
4R.32	Household unmeasured population (water only)	Unmeasured population total used to derive the unmeasured PCC value in 6D.25.

4.51 For the purposes of lines 4R.1 to 4R.12 and 4R.16, 'customers' should be equal to the former June return (table 7) definition of 'billed properties'. This is as follows.

f) Billed properties

These are properties used as single domestic dwellings (normally occupied), receiving water for domestic purposes which are not factories, offices or commercial premises. These include cases where a single aggregate bill is issued to cover separate dwellings having individual standing charges. (In some instances the standing charge may be zero). The number of dwellings attracting an individual standing charge and not the number of bills should be counted. Exclude mixed/commercial properties and multiple household properties, e.g. blocks of flats having only one standing charge. For the avoidance of doubt this exclusion would result in the block of flats in the example being counted as a single property. Where companies issue an assessed charge to a property because metering is not possible or is uneconomic then these properties should be classified as unmeasured. Examples:

Typical family dwelling, i.e. terraced, semi-detached, detached house or flat having individual standing charges.

Local authority family dwellings which each have individual standing charges but may be included in an aggregate water bill.

4.52 For the purposes of lines 4R.17 to 4R.27 where a group of properties are supplied by a single connection these shall be considered as several properties. They should only be considered as a single property if a single bill covers the whole property. This includes where the group of properties is billed by a third party and a single bill is raised to the third party. Where a single bill covers several properties none of the properties should be included within the unbilled property totals in lines 4R.20 and 4R.24.

- 4.53 For the avoidance of doubt cattle troughs should not be included in lines 4R.17 to 4R.26.
- 4.54 For the purposes of lines 4R.13 to 4R.15 and 4R.23 to 4R.26, where a nonhousehold property is recorded within the MOSL¹ database it should be recorded as a billed property unless it is identified as vacant in which case it should be recorded as a void.

¹ Market operator services limited

g) Meter definitions

Basic meters are meters that require manual reads of consumption data through direct access to the meter installation.

AMR meters are meters using automated meter reading (AMR) technology. This enables consumption data to be read remotely without having to directly access the meter or property for a manual reading.

AMI meters are meters using advanced metering infrastructure (AMI) technology. This enables consumption data to be read remotely without having to directly access the meter or property for a manual reading. Consumption data is transferred to the company through an integrated system of smart meters, communications networks, and data management systems. Such systems have the capability to:

Record consumption data and allow ready access to this data by customers (directly or via contractors/agents) and the company at near real time, with data updated daily at a minimum, and made available at a minimum granularity of 1 hour intervals, or such greater frequency and/or granularity as reasonably requested by the customer or its contractors/agents;

Enable automated leak alarms to be communicated to the customer and company; and

Communicate with the internet.

Where necessary we request AMI meter reporting to be split by AMI meters (capable) and AMI meters (active).

AMI meters (capable) are meters which are capable of acting as AMI meters but are not currently. This could be due to the meter being located in an area where the supporting infrastructure has not yet been installed. It is assumed that such meters will be operating as AMR meters.

AMI meters (active) are meters which are acting as AMI meters.

Companies should ensure all meters comply with the appropriate regulations governing cold water meters, and that their metering systems comply with company's obligations under competition law.

Pro forma 4S: Green recovery expenditure for the 12 months ended 31 March 20xx – water resources and water network+

h) Green economic recovery

In July 2021 we published our <u>green economic recovery final decisions</u>, allowing £793 million of new investment. This additional £793 million was part of a total of £2.7 billion of investment proposed by companies to deliver new proposals and accelerate existing ones to deliver an innovative and more resilient future for customers, society and the environment.

We expect all companies delivering green economic recovery schemes to provide an annual update on their progress. This annual report on green recovery should be published alongside the annual performance report as a stand-alone supporting appendix.

We expect companies to develop their own bespoke reporting commentary and summary tables to meet our requirements for reporting on green recovery as details in our green economic recovery final decisions.

Specifically for the five companies² who received new investment allowances in our green economic recovery final decisions we have added tables 4S, 4T,4U, 10A, 10B, 10C, 10E and amended existing Tables to enable companies to account for this additional investment within the existing annual performance reporting framework.

i) Green economic recovery cost reporting overview

- 4.55 Expenditure delivering the green recovery programme should be reported, in addition to other relevant AMP7 expenditure, in the appropriate enhancement expenditure lines in tables 4L or 4M. Where an appropriate line does not exist, companies should define a new company specific line in which to record the expenditure.
- 4.56 Where green recovery expenditure is associated with major projects this should be included in table 4F. Companies should clearly indicate where this has occurred in their supporting narrative.
- 4.57 In addition, for each green recovery scheme the delivery expenditure should be recorded in table 4S or 4T. Companies should provide commentary to reference

² Severn Trent Water, South Staffs Water, South West Water, Thames Water and United Utilities

where expenditure recorded for each green recovery scheme in tables 4S and 4T has been included in the lines of tables 4L and 4M.

4.58 Tables 4S and 4T are dedicated to green recovery expenditure reporting and will enable the tracking of expenditure associated with each green recovery scheme and the overall programme. Since expenditure on green recovery schemes will be subject to a separate reconciliation, these costs should be removed from block A of table 4C and instead be reported in a new table 4U. These costs should reconcile to those included in tables 4S and 4T.

Line	Title	Definition
4S.1-12	Capital / Operating /Totex expenditure by green recovery scheme	The capital / operating / totex expenditure incurred each year for each individual green recovery scheme. The individual schemes reported in lines 1-3, 4-6, 7-9 and 10-12 should be consistent with those identified in the reporting requirements included in the green recovery final decision documentation.
4S.13	Total green recovery programme – capex	The sum of lines 1, 4, 7 and 10.
4S.14	Total green recovery programme – opex	The sum of lines 2, 5, 8 and 11.
4 S .15	Total green recovery programme expenditure	The sum of lines 13 and 14.

Pro forma 4T: Green recovery expenditure for the 12 months ended 31 March 20xx – wastewater network+ and bioresources

- 4.59 For an overview of green economic recovery and reporting requirements see section 4S.
- 4.60 This table captures expenditure associated with schemes delivered under companies' green recovery programmes. Companies should provide commentary to reference where expenditure recorded for each green recovery scheme in table 4T has been reported in the lines of table 4M.

Line	Title	Definition
4T.1-12	Capital / Operating /Totex expenditure by green recovery scheme	The capital / operating / totex expenditure incurred each year for each individual green recovery scheme. The individual schemes reported in lines 1–3, 4–6, 7–9 and 10–12 should be consistent with those identified in the reporting requirements included in the green recovery final decision documentation.
4T.13	Total green recovery programme – capex	The sum of lines 1, 4, 7 and 10.

4T.14	Total green recovery programme – opex	The sum of lines 2, 5, 8 and 11.
4T.15	Total green recovery programme expenditure	The sum of lines 13 and 14.

Pro forma 4U: Impact of Green recovery on RCV

4.61 For an overview of green economic recovery and reporting requirements see section 4S.

Line	Title	Definition
4U.1	Approved bid	The company's approved bid as communicated by Ofwat
4U.2	Actual totex	Calculated as the sum of lines 4S.15 and 4T.15.
4U.3	Variance	4U.2 less 4U.1
4U.4	Variance due to timing of expenditure	The value due to a variation in the timing of the planned expenditure. (i.e. accelerated or deferred)
4U.5	Variance due to efficiency	4U.3 less 4U.4
4U.6	Customer cost sharing rate - outperformance	The customer cost sharing rate for outperformance as published in Ofwat's Financial Flows data reference document on our website alongside the annual publication of the Regulatory Capital Values.
4U.7	Customer cost sharing rate - underperformance	The customer cost sharing rate for underperformance as published in Ofwat's Financial Flows data reference document on our website alongside the annual publication of the Regulatory Capital Values.
4U.8	Customer share of totex - outperformance	4U.3 multiplied by 4U.6
4U.9	Customer share of totex - underperformance	4U.3 multiplied by 4U.7
4U.10	Company share of totex - outperformance	4U.3 less 4U.8
4U.11	Company share of totex - underperformance	4U.3 less 4U.9
4U.12	Increase / decrease in shadow RCV	Calculated as 4U.2 plus 4U.8 minus 4U.9.
4U.13	In period funding	The company's approved in-period funding as communicated by OFWAT.
4U.14	Net increase / decrease in shadow RCV	4U.12 less 4U.13

Pro forma 4V: Mark-to-market of financial derivatives analysed based on payment dates

- 4.62 This table summarises the mark-to-market valuation of all derivatives not just a specific category of swap according to when they are settled. Table 4V should be included in the body of the annual performance report with supporting narrative, where needed, for clarification.
- 4.63 'Derivatives Analysed by earliest payment date' should summarise derivatives on the assumption that they will be terminated on the date of the first break clause.
- 4.64 'Derivatives Analysed by expected maturity date' should summarise derivatives according to when the company expects the instrument will be terminated. In this section, swaps that contain break clauses should be included based on their expected maturity date rather than at the first break clause.
- 4.65 The mark-to-market valuations need to be provided as the total for all swaps that fall into the relevant maturity bucket.
- 4.66 For companies that do not hold derivatives containing break clauses, the
 'Derivatives Analysed by earliest payment date' columns will all be identical to columns under 'Derivatives Analysed based on expected maturity date'.
- 4.67 For all companies, the total mark-to-market column in table 4I should be equal to line 4V.7 column H and column L.
- 4.68 As with table 41, out-of-the-money (liability or outflow) positions should be presented as positive, in-the-money (asset or inflow) positions should be presented as negative.
- 4.69 Net settled derivatives are those where the pay leg and the receivable leg are settled on the same day and the swap contract determines that the two amounts may be set or netted off against each other such that only a single payment is made. An example would be vanilla interest swaps. For example, starting with the first row of Table 4V, i.e. for all derivatives maturing within one year (based on the expected maturity date), assume a company has entered into a swap to pay a fixed interest rate in return for receiving a variable interest rate linked to 3 month Libor or Sonia, with the amounts settled quarterly. If, on the balance sheet date, the net present value of the fixed rate leg is £10 million and the net present value of the variable rate leg is £8 million. The company should enter £2 million in the 'net settled' column on the correct maturity line, the first line in this case (i.e. an out of the money position of £2m).

- 4.70 Gross settled derivatives are derivatives where the amounts due on each leg of the swap is paid in full, for example where the payments are made on different dates or where the swap contract does not allow for netting off. An example would be cross currency swaps. For example, for all gross settled derivatives maturing within one year (based on the expected maturity date), if the total net present value of the pay legs (gross settled outflows) was £15m and the total net present value on the receive legs (gross settled inflows) was £23m, then £15m would be the figure entered in column F of row 4V.1 and -£23m would be the figure entered in column G of row 4V.1
- 4.71 For cross-currency swaps, we expect the mark-to-market to be provided in GBP. Our assumption is that the total net present value on the non-GBP leg is converted to GBP using the mid spot exchange rate at the end of the day on the valuation date (i.e. the closing spot rate. If this assumption is incorrect, please add a note to the table explaining the exchange rate used.
- 4.72 The 'Total' column is the sum of the 'net settled', 'gross settled outflows' and 'gross settled inflows' for each maturity bucket. Using the above example, where we have the following entries analysed by the expected maturity date: +£2m, +£15m, -£23m then the total mark-to-market for derivative financial liabilities due within one year as analysed by the expected maturity date would be an in-the-money position of £6m. '-£6m' would be the figure shown in the total column as in-the-money (asset) positions are presented as negative figures.
- 4.73 The total mark-to-market value of all derivatives analysed by earliest payment date 4V.7 columns H and L should be equal to the total mark-to-market figure for all derivatives in table '41: Category B Financial Derivatives' (row 28, mark-to-market, total value at 31 March).
- 4.74 The total mark to market for all swaps based on holding instrument to maturity line 4V.7 (column L) should equal the total mark to market in table 41.28 (column H).

Line	Title	Definition
4V.1	Due within one year	Net settled, Gross Settled outflows and Gross Settled inflows for derivatives maturing within 1 year of the year ending 31 March – based on the earliest payment date in the left-hand block and based on the expected maturity date in the right- hand block.
4V.2	Between one and two years	Net settled, Gross Settled outflows and Gross Settled inflows for derivatives maturing between one and two years of the year ending 31 March – based on the earliest payment date in the left-hand block and based on the expected maturity date in the right-hand block.

Line	Title	Definition
4V.3	Between two and three years	Net settled, Gross Settled outflows and Gross Settled inflows for derivatives maturing between two and three years of the year ending 31 March – based on the earliest payment date in the left-hand block and based on the expected maturity date in the right-hand block.
4V.4	Between three and four years	Net settled, Gross Settled outflows and Gross Settled inflows for derivatives maturing between three and four years of the year ending 31 March – based on the earliest payment date in the left-hand block and based on the expected maturity date in the right-hand block.
4V.5	Between four and five years	Net settled, Gross Settled outflows and Gross Settled inflows for derivatives maturing between four and five years of the year ending 31 March – based on the earliest payment date in the left-hand block and based on the expected maturity date in the right-hand block.
4V.6	After five years	Net settled, Gross Settled outflows and Gross Settled inflows for derivatives maturing after five years of the year ending 31 March – based on the earliest payment date in the left-hand block and based on the expected maturity date in the right- hand block.
4V.7	Total	The total of the derivatives mark-to-market for the relevant column. The sum of lines 1 to 6 in table 4V for the column.

Pro forma 4W: Defined benefit pension scheme – additional information for the period ending 31 March 20XX

- 4.75 For this table, please enter all GBP values to three decimal places.
- 4.76 We expect this table to be populated each year recognising that, whilst the pension scheme data on an accounting basis (4W.3 to 4W.7) is expected to change annually, on a funding basis pension data is likely to only be revised every three years following the results of a new triennial valuation. Table should be included in the body of the annual performance report with supporting narrative, where needed, for clarification.
- 4.77 If a scheme valuation under part 3 of the Pensions Act 2004 is not required to be obtained, please complete 4W.1 to 4W.7 and in narrative explain why.

Line	Title	Definition	
Scheme Details			
4W.1	Scheme name	Full name of each defined benefit scheme(s) participated in by the regulated company (as a principle or participating employer). If there are two or more, please provide the data in separate columns for each defined benefit pension scheme that the regulated company is responsible for. The table allows for up to three scheme – please add more columns as required. If the regulated company does not participate in any defined benefit scheme, confirm as NA.	
4W.2	Scheme status	For each scheme confirm:	
		If the scheme is closed to new members. If the scheme is closed to the accrual of future defined benefits. This can be input into the cell as narrative line.	
Financial Informat	ion - Scheme valu	ation under IAS/IFRS/FRS	
4W.3	Scheme assets	For each defined benefit scheme participated in by the regulated company, the total value of assets at 31 March as calculated under the applicable accounting standard.	
4W.4	Scheme liabilities	For each defined benefit scheme participated in by the regulated company, the present value of the liabilities at 31 March as calculated by a qualified actuary and consistent with the requirements of the applicable accounting standard.	
4W.5	Scheme surplus/(deficit), Total	For each defined benefit scheme participated in by the regulated company, the surplus or deficit (4W.3 less 4W.4). A surplus position should be presented as positive; a deficit position should be presented as negative.	
4W.6	Scheme surplus/(deficit), Appointed business	For each defined benefit scheme participated in by the regulated company, the surplus or deficit reported in 4W.5 that is attributed to the appointed business. In most cases the surplus/deficit reported on an accounting basis attributed to the appointed business will be the same as the retirement benefit asset/obligation reported in Table 1C. Where they differ, for example because the company supports an additional unfunded scheme, please include a reconciliation between 4W.5 and Table 1C. Where the scheme assets and liabilities are not reported in the financial statements of the regulated company, please include a note to explain why.	
4W.7	Pension deficit recovery payments	Where applicable, the total pension deficit payment (Wholesale and Retail) made by the appointed business in the year ended 31 March.	

Financial Informat	ion - Scheme valu	ation under part 3 of the Pensions Act 2004
4W.8	Scheme funding valuation date	In respect to each defined benefit scheme participated in by the regulated company, the effective date of the most recent actuarial valuation (under part 3 of the Pensions Act 2004) Schemes are required to undertake actuarial valuations at least every three years under the requirements of Part 3 of the Pensions Act 2004. An actuarial valuation means a written report, prepared, and signed by the actuary, valuing the scheme's assets and calculating its technical provisions. Effective date is the date by reference to which the assets are valued and the technical provisions calculated.
4W.9	Assets	Market value of scheme assets as provided in last the actuarial valuation.
4W.10	Technical Provisions	Total Technical Provisions as provided in last the actuarial valuation. A scheme's technical provisions means the amount required, on an actuarial calculation, to make provision for the scheme's liabilities.
4W.11	Scheme surplus/(deficit)	The difference between the scheme assets and technical provisions (4W.9 less 4W.10). A surplus position should be presented as positive; a deficit position should be presented as negative.
4W.12	Discount rate assumption	The discount rate, being the rate(s) of interest used to discount future payments of benefits and calculate the technical provisions reported at 4W.10. This is a text input, with the discount rate to be reported on a 'Gilts plus' basis e.g., Gilts+0.5%. Where the discount rate is not a single rate, please set out e.g., as pre and post retirement again on a Gilts plus basis.
Recovery plan (wh	ere applicable)	
4W.13	Recovery Plan Structure	 Every scheme is subject to a requirement ("the statutory funding objective") that it must have sufficient and appropriate assets to cover its technical provisions. If the statutory funding objective was not met on the effective date of the actuarial valuation (reported in line 4W.5), a recovery plan must be prepared, or if an existing recovery plan is in force, reviewed and if necessary, revised. For each scheme in deficit, please provide in narrative summary: The date on which the recovery plan currently in place was agreed. The duration and deficit recovery contributions that are required to repair the deficit reported in 4W.10 as set out in the Recovery plan and Schedule of Contributions. For example Recovery plan agreed on 31 March 202X. The company will pay the following deficit contributions arising from the latest triennial valuation carried out as at 31 January 202X: £x per annum from 1 February 202X to 31 January 202X rising in line with Consumer Price Index (CPI) at each 1 February; and

		$\pounds x$ per annum from 1 February 202X to 30 June 202X rising in line with Consumer Price Index (CPI) at each 1 February.
4W.14	Recovery plan end date	The date at which the deficit (the funding shortfall reported at 4W.10) is expected to be eliminated under the latest recovery plan.
4W.15	Asset Backed Funding (ABF) arrangements	If there is an ABF arrangement in place, set out the payment structure and any details necessary to understand, for instance What is the underlying income stream under the arrangement and over what period / timeframe? Is that income stream in addition to the Deficit contribution payment noted above? Is the value of the arrangement included as an asset i.e., it is included for the calculation of the deficit?
4W.16	Responsibility for ABF arrangements	Are the contributions under the ABF arrangement as set out above expected to be met in full by the appointed business? Please provide supporting narrative.

5. Definitions of terms; tables 5A-5B (Additional regulatory information – water resources)

Pro forma 5A: Water resources asset and volume data for the 12 months ended 31st March 20xx

Line	Title	Definition
5A.1	Water from impounding reservoirs	Water from impounding (gravity fed) reservoirs, including bulk supply. Operational sources from which no water has been obtained in the report year should not be included in the number of sources. See RAG 4 – Appendix 2 (Water resources further guidance)
5A.2	Water from pumped storage reservoirs	Water from pumped storage reservoirs including bulk supply. Operational sources from which no water has been obtained in the report year should not be included in the number of sources. Please refer to additional guidance relating to number of sources. Pumped storage reservoirs will receive an element of gravity flow. If this flow makes a material contribution (>20%) to the volume of the reservoir the distribution input from this source should be allocated proportionally between the two reservoir types. When reporting source numbers the source should be allocated according to the type of flow that delivers the larger part of the reservoir's input. For example, if 60% of the reservoir's volume is pumped river water the source should be counted as a pumped storage source. See RAG 4 – Appendix 2 (Water resources further guidance)
5A.3	Water from river abstractions	Water from river abstractions including bulk supply. Operational sources from which no water has been obtained in the report year should not be included in the number of sources. Please refer to additional guidance relating to number of sources. See RAG 4 – Appendix 2 (Water resources further guidance)
5A.4	Water from groundwater works, excluding managed aquifer recharge (MAR) water supply schemes	Water from groundwater works including bulk supply but excluding managed aquifer recharge (MAR) water supply schemes. Operational sources from which no water has been obtained in the report year should not be included in the number of sources. Please refer to additional guidance relating to number of sources.
5A.5	Water from artificial recharge (AR) water supply schemes	Water from AR supply schemes including bulk supply. AR schemes are a subset of managed aquifer recharge (MAR) schemes, which functions by recharging an aquifer before or after abstraction. The water abstracted is not necessarily the water that has been recharged, so the water can be of natural quality and require more complex treatment. This excludes aquifer storage and recovery (ASR) water supply schemes (see line below)
5A.6	Water from aquifer storage and recovery (ASR) water supply schemes	Water from ASR supply schemes including bulk supply. ASR schemes are a subset of managed aquifer recharge (MAR) schemes, which functions by recharging an aquifer, storing that water and maintaining its quality. The aim is to enable simple and less costly treatment of the re-abstracted water, and that the water recharged is predominantly the water that is re- abstracted. This excludes artificial recharge (AR) water supply schemes (see line above)

Line	Title	Definition
5A.7	Water from saline abstractions	Water from saline abstractions including bulk supply. Operational sources from which no water has been obtained in the report year should not be included in the number of sources.
5A.8	Water from water reuse schemes	Water from reuse schemes. Direct effluent reuse, not returned to the environment.
5A.9	Number of impounding reservoirs	Number of sources of impounding reservoirs. Please refer to additional guidance in line 17 relating to number of sources.
5A.10	Number of pumped storage reservoirs	Number of sources of pumped storage reservoirs. Please refer to additional guidance in line 17 relating to number of sources. Pumped storage reservoirs will receive an element of gravity flow. The source should be allocated according to the type of flow that delivers the larger part of the reservoir's input. For example, if 60% of the reservoir's volume is pumped river water the source should be counted as a pumped storage source.
5A.11	Number of river abstractions	Number of sources of river abstractions. Please refer to additional guidance in line 17 relating to number of sources.
5A.12	Number of groundwater works, excluding managed aquifer recharge (MAR) water supply schemes	Number of sources of groundwater works, excluding MAR water supply schemes. Please refer to additional guidance in line 17 relating to number of sources.
5A.13	Number of artificial recharge (AR) water supply schemes	Number of sources of AR water supply schemes. Please refer to additional guidance in line 17 relating to number of sources.
5A.14	Number of aquifer storage and recovery (ASR) water supply schemes	Number of sources of ASR water supply schemes. Please refer to additional guidance in line 17 relating to number of sources.
5A.15	Number of saline abstraction schemes	Total number of sources of saline abstraction schemes. Please refer to additional guidance in line 17 relating to number of sources.
5A.16	Number of reuse schemes	Total number of reuse schemes. Please refer to additional guidance in line 17 relating to number of sources.
5A.17	Total number of sources	The total number of sources operated by a company. This should equal the sum of lines 5A.9 to 5A.16. Subject to the relevant appendix in RAG4 a source is defined as an independent raw water supply that directly supplies a treatment works, such as impounding reservoirs, river abstractions, groundwater works, aquifer recharge water supply schemes, saline abstractions and reuse schemes. Standby or mothballed sources from which no water has been obtained in the year should not be included.
5A.18	Total number of water reservoirs	All reservoirs used for holding raw water. This line shall include impounding reservoirs and pumped storage reservoirs.
5A.19	Total volumetric capacity of water reservoirs	Total design/construction capacity of all reservoirs used for holding raw water. This line shall include impounding reservoirs, pumped storage reservoirs and bank side storage facilities.

Line	Title	Definition
5A.20	Total number of intake and source pumping stations	The total number of surface water intake and groundwater works source pumping stations associated with potable, non-potable and raw water systems. For the avoidance of doubt this is the number of sites as opposed to the number of individual pumps.
5A.21	Total installed power capacity of intake and source pumping stations	Total installed power of all abstraction pumpsets (duty, assist and standby - irrespective of the number that may be working at any one time) associated with raw water abstraction. Refer to RAG 2 Appendix 2 for proportional allocation.
5A.22	Total length of raw water abstraction mains and other conveyors	The length of all mains or other conveyors associated with raw water abstraction between water resources defined assets (eg a river intake pumping station and a surface water reservoir) or between the sources or from source and the first water resource asset. Include all green coloured pipework in the examples given in Appendix 2 of RAG 4.
5A.23	Average pumping head – raw water abstraction	Average pumping head for the raw water abstraction business unit as defined in RAG 4 and RAG 2. This is to be calculated using actual pumping head rather than the rating of the pumps.
5A.24	Energy consumption - water resources (MWh)	Measure of energy usage (electricity, gas, liquid fuels) by the water resource business units (irrespective of the power source). Energy usage should be measured as that which is either imported or self- generated and used in relevant business unit. No account should be taken of self-generated energy that is exported from the business unit where it is generated. Fleet transport and standby generation should be included as should an allowance for administrative buildings and head office function.
5A.25	Total number of raw water abstraction imports	Total number of raw water abstraction import points. Points not used in the year should be included.
5A.26	Water imported from 3rd parties to raw water abstraction systems	The average daily water imported from 3rd parties to raw water abstraction systems.
5A.27	Total number of raw water abstraction exports	Total number of raw water abstraction export points. Points not used should be included.
5A.28	Water exported to 3rd parties from raw water abstraction systems	The average daily water exported to 3rd parties from raw water abstraction systems.
5A.29	Water resources capacity (measured using water resources yield)	The company level water resources capacity, which should be the sum of all company water resource zones (WRZs) across all of its licensed areas. Capacity is measured in terms of water resources yield which captures the average volume of water available from the environment and constrained by water resources control assets. See RAG 4 Appendix 2 for guidance on the calculation of water resources yield.
5A.30	Total number of completed investigations (WINEP/NEP), cumulative for AMP	Total number of completed investigations (WINEP/NEP), associated with the water resource price control area driver codes (eg WFD, EE, WFDGW, NERC, DrWPA, HD, SSSI, INNS) cumulative for AMP.

5.1 When classifying the water into one of the categories, the following guidelines should be followed:

Water abstracted from boreholes or springs and pumped directly to a treatment works should be classified as groundwater water. Water abstracted from a river and transported directly to a treatment works (either by pumping or by gravity) should be classified as river water. Water that is transported directly to a treatment works from a reservoir which has been filled by a river should be classified as water from reservoirs (this is because, in general, while the water is stored in the reservoir, sediments will settle making the water easier to treat). Water that is transported from a reservoir, via a river, to a treatment works

should be classified as water from a river.
5.2 If multiple sources feed a works (for example a river and a number of boreholes) and the flow from these sources is combined prior to treatment, then all of the

- and the flow from these sources is combined prior to treatment, then all of the flow entering the works can be categorised as the more difficult to treat water. (In this example, all of the water would be categorised as river water.)
- 5.3 Line 5A.24 relates to the energy costs associated with operating costs only. For consistency within the APR (Line 2B.1) this line should include all energy costs (including electricity, gas and fuel for vehicles, plant and machinery). These lines are intended to capture energy consumed; energy exported should not be included.

Line	Title	Definition
5B.1	Power	All energy costs, including the climate change levy and the carbon reduction commitment. Any cost savings from power generated internally should be netted off these costs.
5B.2	Income treated as negative expenditure	Income received from sales which are external to the appointed business and which directly relate to the water processes. It should be input as a negative number. This will include; Electricity sales from sources such as Hydro, PV and wind to external parties. Electricity sales from back-up generators under arrangements such as the National Grid 'STOR', "frequency response" and "dynamic demand".
5B.3	Abstraction charges/ discharge consents	Total cost of abstraction charges and/or discharge consents by the Environment Agency / Natural Resources Wales or the Canal & River Trust.

Pro forma 5B: Water resources operating cost analysis for the 12 months ended 31 March 20xx

Line	Title	Definition
5B.4	Bulk Supply	Total payments for bulk imports. If a supply is a shared supply and is jointly owned, the costs associated with it should not be reported here but in the appropriate cost line.
5B.5	Renewals expensed in year (Infrastructure)	Infrastructure renewals which are expensed rather than capitalised in the statutory accounts. 'Renewals' are generally planned activities to replace significant lengths of pipework or parts of an asset. These are targeted at improving network performance or solving ongoing problems and restores an asset to full capability.
5B.6	Renewals expensed in year (Non- Infrastructure)	Non-infrastructure renewals which are expensed rather than capitalised in the statutory accounts. 'Renewals' are generally planned activities targeted at improving network performance or solving ongoing problems and restores an asset to full capability.
5B.7	Other operating expenditure excluding renewals	Other operating expenditure not included in previous lines 5B.5 to 5B.8
5B.8	Local authority and Cumulo rates	The cost of local authority rates. This should include both the local authority rates and cumulo rates.
5B.9	Total operating expenditure (excluding 3rd party)	Total operating expenditure excluding 3rd party costs recorded in table 4J. The sum of lines 5B.1 to 5B.8.

- 5.4 Artificial recharge (AR) schemes are a subset of managed aquifer recharge (MAR) schemes, which function by recharging an aquifer before or after abstraction. The water abstracted is not necessarily the water that has been recharged, so the water can be of natural quality and require more complex treatment.
- 5.5 Aquifer storage and recovery (ASR) schemes are a subset of managed aquifer recharge (MAR) schemes, which function by recharging an aquifer, storing that water and maintaining its quality. The aim is to enable simple and less costly treatment of the re-abstracted water, and that the water recharged is predominantly the water that is re-abstracted.

6. Definitions of terms; tables 6A-6F (Additional regulatory information – water network plus)

Pro forma 6A: Raw water transport, raw water storage and water treatment for the 12 months ended 31st March 20xx

Line	Title	Definition
6A.1	Total number of balancing reservoirs	All reservoirs used for holding transported raw water. See RAG4 – Appendix 2 (Water resources further guidance)
6A.2	Total volumetric capacity of balancing reservoirs	Total design/construction capacity of all balancing reservoirs used for holding transported raw water.
6A.3	Total number of raw water transport stations	Total number of raw water transport stations. For the avoidance of doubt this is the number of sites as opposed to the number of individual pumps.
6A.4	Total installed power capacity of raw water transport pumping stations	Total installed power of all raw water transport pumpsets (duty, assist and standby – irrespective of the number that may be working at any one time)
6A.5	Total length of raw water transport mains and other conveyors	The length of all mains or other conveyors associated with raw water transport between water resources defined assets (e.g. a river intake pumping station and a surface water reservoir) and raw water storage and/or water treatment defined assets. Include all amber coloured pipework in the examples given in Appendix 2 of RAG 4.
6A.6	Average pumping head ~ raw water transport	Average pumping head for the raw water transport business unit as defined in RAG4 and RAG2. This is to be calculated using actual pumping head rather than the rating of the pumps.
6A.7	Energy consumption – raw water transport (MWh)	Measure of energy usage (electricity, gas, liquid fuels) by the raw water transport business unit (irrespective of the power source). Energy usage should be measured as that which is either imported or self-generated and used in relevant business unit. No account should be taken of self-generated energy that is exported from the business unit where it is generated. Fleet transport and standby generation should be included as should an allowance for administrative buildings and head office function.
6A.8	Total number of raw water transport imports	Total number of raw water transport import points. Points not used in the year should still be included.
6A.9	Water imported from 3rd parties to raw water transport systems	The average daily water imported from 3rd parties to raw water transport systems.
6A.10	Total number of raw water transport exports	Total number of raw water transport export points. Points not used in the year should still be included.

Line	Title	Definition
6A.11	Water exported to 3rd parties from raw water transport systems	The average daily water exported to 3rd parties from raw water transport systems.
6A.12	Total length of raw and pre-treated (non-potable) water transport mains for supplying customers	 The length of all dedicated raw and pre-treated (non-potable) water mains for supplying customers. Include; raw water and pre-treated (non-potable) mains which deliver non-potable water to the end customer or a 3rd party water company, and partially treated water mains which deliver non-potable water to the end customer (e.g. industrial process water and fire-fighting mains) or a 3rd party water company. Exclude raw water abstraction and transport mains and other conveyors reported in 5A.22 and 6A.5, and raw and partially treated water treatment works.

Line	Title	Water treated MI/d	Number of works
6A.13	All simple disinfection works	The average daily distribution input derived from water works providing simple disinfection and pre-aeration only. Bulk supplies received should be included and bulk exports should be omitted.	Total number of water works providing simple disinfection and pre-aeration only
6A.14	W1 works	The average daily distribution input derived from water works providing simple physical treatment only. Bulk supplies received should be included and bulk exports should be omitted.	Total number of water works providing simple physical treatment and/or blending only
6A.15	W2 works	The average daily distribution input derived from water works providing single stage complex physical or chemical treatment but excluding processes in W4, W5 & W6. Bulk supplies received should be included and bulk exports should be omitted.	Total number of water works providing single stage complex physical or chemical treatment but excluding processes in W4, W5 & W6
6A.16	W3 works	The average daily distribution input derived from water works providing more than one stage of complex treatment but excluding processes in W4, W5 & W6. Bulk supplies received should be included and bulk exports should be omitted.	Total number of water works providing more than one stage of complex treatment but excluding processes in W4, W5 & W6
6A.17	W4 works	The average daily distribution input derived from water works providing one of the processes with very high operating costs. Bulk supplies received should be included and bulk exports should be omitted.	Total number of water works providing one of the processes with very high operating costs

Line	Title	Water treated MI/d	Number of works
6A.18	W5 works	The average daily distribution input derived from water works providing two or more of the processes with very high operating costs. Bulk supplies received should be included and bulk exports should be omitted.	Total number of water works providing two or more of the processes with very high operating costs
6A.19	W6 works	The average daily distribution input derived from water works providing processes with extremely high operating costs. Bulk supplies received should be included and bulk exports should be omitted.	Total number of water works providing processes with extremely high operating costs

Line	Title	% of total distribution input (DI)	Number of works
6A.20	Band Disclosure	Please disclose the proportion (%) of	Please disclose the number of
	(nr) WTWs in size	total DI for band 1. See additional	WTW for each banding. See
	band 1	guidance below.	Additional Guidance
6A.21	Band Disclosure	Please disclose the proportion (%) of	Please disclose the number of
	(nr) WTWs in size	total DI for band 2. See additional	WTW for each banding. See
	band 2	guidance below.	Additional Guidance
6A.22	Band Disclosure	Please disclose the proportion (%) of	Please disclose the number of
	(nr) WTWs in size	total DI for band 3. See additional	WTW for each banding. See
	band 3	guidance below.	Additional Guidance
6A.23	Band Disclosure	Please disclose the proportion (%) of	Please disclose the number of
	(nr) WTWs in size	total DI for band 4. See additional	WTW for each banding. See
	band 4	guidance below.	Additional Guidance
6A.24	Band Disclosure	Please disclose the proportion (%) of	Please disclose the number of
	(nr) WTWs in size	total DI for band 5. See additional	WTW for each banding. See
	band 5	guidance below.	Additional Guidance
6A.25	Band Disclosure	Please disclose the proportion (%) of	Please disclose the number of
	(nr) WTWs in size	total DI for band 6. See additional	WTW for each banding. See
	band 6	guidance below.	Additional Guidance
6A.26	Band Disclosure	Please disclose the proportion (%) of	Please disclose the number of
	(nr) WTWs in size	total DI for band 7. See additional	WTW for each banding. See
	band 7	guidance below.	Additional Guidance
6A.27	Band Disclosure	Please disclose the proportion (%) of	Please disclose the number of
	(nr) WTWs in size	total DI for band 8. See additional	WTW for each banding. See
	band 8	guidance below.	Additional Guidance

Line	Title	Definition
6A.28	Peak week production capacity (PWPC)	Peak week production capacity (PWPC) is equivalent to the maximum volume of water which can be put into supply and sustained over a period of one week as used in Tables 3F and 3I.

6A.29	Total peak week production capacity (PWPC) having enhancement expenditure for grey solution improvements	The amount of total PWPC that has benefitted from having enhancement expenditure for grey solution improvements to address raw water quality deterioration, on a WTW's basis.
	to address raw water quality deterioration	
6A.30	Total peak week production capacity (PWPC) having enhancement expenditure for green solutions improvements to address raw water quality deterioration	The amount of total PWPC that has benefitted from having enhancement expenditure for green solution improvements to address raw water quality deterioration, on a WTW's basis.
6A.31	Total water treated at more than one type of works	Where water is treated at more than one type of works shown in lines 6A.13 to 6A.19 above, the average daily input which is recorded more than once in rows 6A.13 to 6A.19 above, entered as a negative.
6A.32	Number of treatment works requiring remedial action because of raw water deterioration	The number of water treatment works that require remedial action because of raw water deterioration. All works should be supported by the drinking water inspectorate (DWI) or in the case of planned activity be proposed to the DWI. The works should be included in the year the substantive activity is planned to take place.
6A.33	Zonal population receiving water treated with orthophosphate	Zonal population receiving water treated with orthophosphate, in thousands
6A.34	Average pumping head – water treatment	Average pumping head for the water treatment business unit as defined in RAG 4 and RAG 2. This is to be calculated using actual pumping head rather than the rating of the pumps.
6A.35	Energy consumption - water treatment (MWh)	Measure of energy usage (electricity, gas, liquid fuels) by the water treatment wholesale business unit (irrespective of the power source). Energy usage should be measured as that which is either imported or self-generated and used in relevant business unit. No account should be taken of self-generated energy that is exported from the business unit where it is generated. Fleet transport and standby generation should be included as should an allowance for administrative buildings and head office function.
6A.36	Total number of water treatment imports	Total number of water treatment import points. Points not used in the year should still be included.
6A.37	Water imported from 3rd parties to water treatment works	The average daily water imported from 3rd parties to water treatment systems.
6A.38	Total number of water treatment exports	Total number of water treatment export points. Points not used in the year should still be included.
6A.39	Water exported to 3rd parties from water treatment works	The average daily water exported to 3rd parties from water treatment systems.

- 6.1 For both groundwater and surface water, a works is here defined as an individual location which receives raw or partially treated water for treatment (excluding secondary disinfection) and direct delivery to customers.
- 6.2 If the output of a site needs to be blended so as to become potable, then that site in itself is not defined as a works. However, where the total treatment process is split between a number of sites, the DI entering treated distribution should be split pro rata between bands based on the volumes treated at the individual sites. The pre-aeration of deep borehole water is included in category SD.
- 6.3 Companies should include water treatment works that have not been used in the year but have not been decommissioned and state in their commentary any instances where this is the case.

Categories of treatment types	Examples
SD: Works providing simple disinfection only	Marginal chlorination
	Pre-aeration
W1: Simple disinfection plus simple physical treatment	Rapid gravity filtration
and/or blending only	Slow sand filtration
	Pressure filtration
	Aeration (solvent removal)
W2: Single stage complex physical or chemical	Super chlorination
treatment	Coagulation
W3: More than one stage of complex treatment but	Flocculation
excluding processes in W4, W5 or W6	Biofiltration
	pH correction
	Softening
W4: Single stage complex physical or chemical	Membrane filtration (excluding
treatment with significantly higher operating costs than	desalination)
in W2/ W3	Ozone treatment
W5: More than one stage of complex, high cost	Activated carbon/ pesticide removal
treatment	UV treatment
	Adsorption treatment
W6: Works with one or more very high cost processes	Desalination
	Re-use

6.4 Line 6A.32 relates to the energy costs associated with operating costs only. For consistency within the APR (Line 2B.1) this line should include all energy costs (including electricity, gas and fuel for vehicles, plant and machinery). These lines are intended to capture energy consumed; energy exported should not be included.

Band Guidance 6A.20 to 6A.27

Size band	Peak week production capacity (PWPC) MI/d
Band 1	< 2
Band 2	≥ 2 and < 4
Band 3	≥4 and < 8
Band 4	≥8 and < 16
Band 5	≥16 and < 32
Band 6	≥32 and < 64
Band 7	≥64 and < 128
Band 8	≥ 128

Pro forma 6B: Treated water distribution – assets and operations for the 12 months ended 31st March 20xx

6.5 Measured volumes supplied to NAVs should be reported as bulk exports under 6B.28, Water exported to 3rd parties' treated water distribution systems.

Line	Title	Definition
6B.1	Total installed power capacity of potable water pumping stations	Total installed power of all potable treated water pumpsets (duty, assist and standby - irrespective of the number that may be working at any one time) associated with treated water distribution (into and within). Refer to RAG 2 A2 for proportional allocation.
6B.2	Total volumetric capacity of service reservoirs	The installed design/constructed capacity of treated water service reservoirs within the water supply system, including treated water reservoirs at water treatment works and any secondary disinfection plant on reservoir sites. Include break pressure tanks. Exclude decommissioned assets.
6B.3	Total volumetric capacity of water towers	The installed design/constructed capacity of treated water storage towers within the water supply system. Exclude decommissioned assets.
6B.4	Water delivered (non- potable)	All non-potable water supplied as part of the appointed business. Include all non-potable water charged at standard and non- standard rates.

Line	Title	Definition
6B.5	Water delivered (potable)	All potable water supplied as part of the appointed business. This includes: the average volume of water delivered for billed measured residential and businesses; the estimated volume of water delivered for billed unmeasured residential and business properties; supply pipe leakage; meter under registration for water delivered which is measured unbilled water taken legally for legitimate purposes (public supplies for which no charge is made e.g. some sewer flushing etc, uncharged church supplies, fire training and fire-fighting supplies where these are not charged irrespective of whether or not they are metered). Do not include volumes associated with leakage allowance rebates to metered customers; water taken illegally providing it is based on actual occurrences using sound and auditable identification and recording procedures (if not this should be treated as distribution losses and excluded from this line).
6B.6	Water delivered (billed measured residential properties)	Average volume of water delivered to residential properties which is measured (Ml/d). This is to include supply pipe leakage and meter under-registration. Additional meters fitted to measured residential properties for ancillary supplies (e.g. external hosepipes) which are non-commercial are to be included, as should any fitted to unmeasured residential properties if this is how revenue is allocated. Exclude miscellaneous use (Distribution system operational use, water taken legally unbilled and water taken illegally unbilled).
6B.7	Water delivered (billed measured businesses)	Average volume of water delivered to businesses which is measured (MI/d). This is to include supply pipe leakage and meter under- registration. Additional meters fitted to measured businesses for ancillary supplies (e.g. external hosepipes) which are non- commercial are to be included, as should any fitted to unmeasured businesses if this is how revenue is allocated. Exclude miscellaneous use (Distribution system operational use, Water taken legally unbilled and Water taken illegally unbilled).
6B.8	Proportion of distribution input derived from impounding reservoirs	Proportion of distribution input derived from impounding (gravity fed) reservoirs, including bulk supply. Operational sources from which no water has been obtained in the report year should not be included in the number of sources.
6B.9	Proportion of distribution input derived from pumped storage reservoirs	Proportion of distribution input derived from pumped storage reservoirs including bulk supply. Operational sources from which no water has been obtained in the report year should not be included in the number of sources. Please refer to additional guidance relating to number of sources. Pumped storage reservoirs will receive an element of gravity flow. If this flow makes a material contribution (>20%) to the volume of the reservoir the distribution input from this source should be allocated proportionally between the two reservoir types. When reporting source numbers, the source should be allocated according to the type of flow that delivers the larger part of the reservoir's input. For example, if 60% of the reservoir's volume is pumped river water the source should be counted as a pumped storage source.

Line	Title	Definition
6B.10	Proportion of distribution input derived from river abstractions	Proportion of distribution input derived from river abstractions including bulk supply. Operational sources from which no water has been obtained in the report year should not be included in the number of sources. Please refer to additional guidance relating to number of sources.
6B.11	Proportion of distribution input derived from groundwater works, excluding managed aquifer recharge (MAR) water supply schemes	Proportion of distribution input derived from groundwater works including bulk supply, but excluding managed aquifer recharge (MAR) water supply schemes. Operational sources from which no water has been obtained in the report year should not be included in the number of sources. Please refer to additional guidance relating to number of sources.
6B.12	Proportion of distribution input derived from artificial recharge (AR) water supply schemes	Proportion of distribution input derived from AR supply schemes including bulk supply. AR schemes are a subset of managed aquifer recharge (MAR) schemes, which functions by recharging an aquifer before or after abstraction. The water abstracted is not necessarily the water that has been recharged, so the water can be of natural quality and require more complex treatment. This excludes aquifer storage and recovery (ASR) water supply schemes (see line below).
6B.13	Proportion of distribution input derived from aquifer storage and recovery (ASR) water supply schemes	Proportion of distribution input derived from ASR supply schemes including bulk supply. ASR schemes are a subset of managed aquifer recharge (MAR) schemes, which functions by recharging an aquifer, storing that water and maintaining its quality. The aim is to enable simple and less costly treatment of the re-abstracted water, and that the water recharged is predominantly the water that is re- abstracted. This excludes artificial recharge (AR) water supply schemes (see line above).
6B.14	Proportion of distribution input derived from saline abstractions	Proportion of distribution input derived from saline abstractions including bulk supply. Operational sources from which no water has been obtained in the report year should not be included in the number of sources.
6B.15	Proportion of distribution input derived from water reuse schemes	Proportion of distribution input derived from reuse schemes. Direct effluent reuse, not returned to the environment.
6B.16	Total number of potable water pumping stations that pump into and within the treated water distribution system	The sum of owned and operated groundwater, surface water, re- pumping and import pumping stations that pump into and within the treated water distribution system (potable water).
6B.17	Number of potable water pumping stations delivering treated groundwater into the treated water distribution system	The number of potable water pumping stations delivering treated groundwater into the treated water distribution system. Groundwater stations are to be counted as 1, regardless of if it has single lift or split lift / tandem pumping arrangements. Groundwater stations are to be counted as 1 for each separate site, where the pumped output is blended 'within' the treated water distribution system. See Example 3. Do not include stations where water enters the treated distribution system by gravity alone.

Line	Title	Definition
6B.18	Number of potable water pumping stations delivering surface water into the treated water distribution system	The number of potable water pumping stations delivering surface water into the treated water distribution system. Do not include stations where water enters the treated distribution system by gravity alone.
6B.19	Number of potable water pumping stations that re- pump water already within the treated water distribution system	The number of potable water pumping stations that re-pump water already within the treated water distribution system. Do not include single property boosters which are bespoke single customer (residential or business) solutions to overcome localised pressure and flow complaints.
6B.20	Number of potable water pumping stations that pump water imported from a 3rd party supply into the treated water distribution system	The number of potable water pumping stations that pump water imported from a 3rd party supply into the treated water distribution system. Do not include stations where water enters the treated distribution system by gravity alone.
6B.21	Total number of service reservoirs	The number of treated water service reservoirs within the water supply system including treated water reservoirs at water treatment works and any secondary disinfection plant on reservoir sites. Include break pressure tanks. Exclude decommissioned assets. A single structure divided into separate cells counts as one reservoir.
6B.22	Number of water towers	The number of treated water service towers within the water supply system. Exclude decommissioned assets.
6B.23	Energy consumption – treated water distribution (MWh)	Measure of energy usage (electricity, gas, liquid fuels) by the treated water distribution wholesale business unit (irrespective of the power source). Energy usage should be measured as that which is either imported or self-generated and used in relevant business unit. No account should be taken of self-generated energy that is exported from the business unit where it is generated. Fleet transport and standby generation should be included as should an allowance for administrative buildings and head office function.
6B.24	Average pumping head – treated water distribution	Average pumping head for the treated water distribution business unit as defined in RAG 4 and RAG 2. This is to be calculated using actual pumping head rather than the rating of the pumps.
6B.25	Total number of treated water distribution imports	Total number of treated water distribution import points. Points not used in the year should be included.
6B.26	Water imported from 3rd parties to treated water distribution systems	The average daily water imported from 3rd parties to treated water distribution systems.
6B.27	Total number of treated water distribution exports	Total number of treated water distribution export points. Points not used in the year should still be included.

Line	Title	Definition
6B.28	Water exported to 3rd parties from treated water distribution systems	The average daily water exported to 3rd parties from treated water distribution systems.
6B.29	Peak seven day rolling average distribution input	The peak seven day rolling average distribution input (DI) is the average daily DI of the seven consecutive days within the charging year 1 April - 31 March with the highest DI. Please include appropriate commentary identifying the seven day period when the peak seven day rolling average occurred and detail of the contributing causes of the peak demand. For avoidance of doubt this should be based on pre-MLE figures and represent the volume of potable water input to the distribution network at treatment works, boreholes and bulk potable supply imports, with any bulk potable supply exports deducted.
6B.30	Peak seven day rolling average distribution input as a percentage of annual average distribution input	Calculated by dividing line 6B.29 by line 6B.39 and expressed as a percentage.

For water balance and leakage component data we provide three tables for company level, region 1 and region 2 level reporting. The majority of companies will only need to complete the company level tables. The regional tables are provided for companies that have regional performance commitment levels relating to demand components. We add the regional line references in brackets in the table below.

For water balance components:

Lines 6B.31 to 6B.39 should be used for company level reporting Lines 6B.40 to 6B.48 should be for region 1 level reporting Lines 6B.49 to 6B.57 should be for region 2 level reporting

For leakage components:

Lines 6B.58 to 6B.67 should be used for company level reporting Lines 6B.68 to 6B.77 should be for region 1 level reporting Lines 6B.78 to 6B.87 should be for region 2 level reporting

Line	Title	Definition
6B.31 (6B.40, 6B.49)	Measured household consumption (excluding supply pipe leakage)	Measured household consumption (excluding supply pipe leakage) for the reporting year. Reported post MLE. Use line 6B.31 for company level reporting, line 6B.40 for region 1 level reporting and line 6B.49 for region 2 level reporting.

Line	Title	Definition
6B.32 (6B.41, 6B.50)	Unmeasured household consumption (excluding supply pipe leakage)	Unmeasured household consumption (excluding supply pipe leakage) for the reporting year. Reported post MLE. Use line 6B.32 for company level reporting, line 6B.41 for region 1 level reporting and line 6B.50 for region 2 level reporting.
6B.33 (6B.42, 6B.51)	Measured non- household consumption (excluding supply pipe leakage)	Measured non-household consumption (excluding supply pipe leakage). Reported post MLE. Use line 6B.33 for company level reporting, line 6B.42 for region 1 level reporting and line 6B.51 for region 2 level reporting.
6B.34 (6B.43, 6B.52)	Unmeasured non-household consumption (excluding supply pipe leakage)	Unmeasured non-household consumption (excluding supply pipe leakage). Reported post MLE. Use line 6B.34 for company level reporting, line 6B.43 for region 1 level reporting and line 6B.52 for region 2 level reporting.
6B.35 (6B.44, 6B.53)	Total annual leakage	Total annual leakage measures the sum of distribution losses and supply pipe losses in megalitres per day (Ml/d). It includes any uncontrolled losses between the treatment works and the customer's stop tap. It does not include internal plumbing losses. Reported post MLE. Use line 6B.35 for company level reporting, line 6B.44 for region 1 level reporting and line 6B.53 for region 2 level reporting.
6B.36 (6B.45, 6B.54)	Distribution system operational use	Distribution system operational use includes water used by a company to meet its statutory obligations particularly those relating to water quality. Examples include mains flushing and air scouring. Reported post MLE. Use line 6B.36 for company level reporting, line 6B.45 for region 1 level reporting and line 6B.54 for region 2 level reporting.
6B.37 (6B.46, 6B.55)	Water taken unbilled	 Total water taken unbilled (whether legally or illegally). Water used by the company for mains tests, flushing, washouts, running to waste, or incurred through burst mains or other leakage should be excluded. Reported post MLE. Use line 6B.37 for company level reporting, line 6B.46 for region 1 level reporting and line 6B.55 for region 2 level reporting. Leakage losses resulting from supply pipe leakage on void properties should not be included in this line as it is reported within the total leakage component of the water balance (line 6B.35 for company level reporting and line 6B.44 for region 1 level reporting and line 6B.53 for region 2 level reporting and line 6B.53 for region 2 level reporting and line 6B.53 for region 2 level reporting respectively). Supply pipe leakage on void properties is also identified separately in the leakage components included in lines 6B.64 to 6B.67 for company level reporting, lines 6B.74 to 6B.77 for region 1 reporting and lines 6B.84 to 6B.87 for region 2 reporting.

Line	Title	Definition
6B.38 (6B.47, 6B.56)	Distribution input	Distribution input is the average amount of potable water entering the distribution system. Please refer to the additional guidance for a diagrammatic representation of what this should include. Reported post MLE.
		Use line 6B.38 for company level reporting, line 6B.47 for region 1 level reporting and line 6B.56 for region 2 level reporting.
		For company level reporting line 6B.38 should be equal to the sum total of lines 6B.31 to 6B.37.
		For region 1 level reporting line 6B.47 should be equal to the sum total of lines 6B.40 to 6B.46.
		For region 2 level reporting line 6B.56 should be equal to the sum total of lines 6B.49 to 6B.55.
6B.39 (6B.48, 6B.57)	Distribution input (pre-MLE)	Distribution input (pre-MLE) is a measure of the volume of potable water input to the distribution network at treatment works, boreholes and bulk potable supply imports, with any bulk potable supply exports deducted. Distribution input is reported as an annual average MI/d and should be reported as a pre-MLE figure.
		Use line 6B.39 for company level reporting, line 6B.48 for region 1 level reporting and line 6B.57 for region 2 level reporting.

Line	Title	Definition
6B.58 (6B.68, 6B.78)	Leakage upstream of DMA	Represents the losses between distribution input (DI) meters and the zonal or DMA meters used for operational leakage management (i.e., network upstream of DMA meters used for leakage targeting, including any service reservoirs. Post MLE estimates should be used for this reporting line. For companies that use zonal reporting that includes trunk mains and service reservoirs as part of reporting total leakage, this line should be the difference between total leakage and DMA/sub zonal leakage.
		For companies that report total leakage using DMAs plus other estimates for trunk mains and service reservoir leakage, these post MLE* estimates should be used to derive this line.
		Use line 6B.58 for company level reporting, line 6B.68 for region 1 level reporting and line 6B.78 for region 2 level reporting.
		For company level reporting line 6B.58 is a subcomponent of 6B.35 and lines 6B.58 to 6B.67 should sum to the total in 6B.35.
		For region 1 level reporting line 6B.68 is a subcomponent of 6B.44 and lines 6B.68 to 6B.77 should sum to the total in 6B.44.
		For region 2 level reporting line 6B.78 is a subcomponent of 6B.53 and lines 6B.78 to 6B.87 should sum to the total in 6B.53.
		For company level reporting lines 6B.58 and 6B.59 replace the previous line, 'Distribution losses' with the sum of 6B.58 and 6B.59 providing the equivalent 'Distribution losses' figure.
		For region 1 level reporting lines 6B.68 and 6B.69 replace the previous line, 'Distribution losses' with the sum of 6B.68 and 6B.69 providing the equivalent 'Distribution losses' figure.
		For region 2 level reporting lines 6B.78 and 6B.79 replace the previous line, 'Distribution losses' with the sum of 6B.78 and 6B.79 providing the equivalent 'Distribution losses' figure.

Line	Title	Definition
6B.59 (6B.69, 6B.79)	Distribution main losses	 Represents the losses company's potable water distribution mains downstream of DMA meters, excluding any customer supply pipe losses. Reported as a post MLE figure. Use line 6B.59 for company level reporting, line 6B.69 for region 1 level reporting and line 6B.79 for region 2 level reporting. For company level reporting line 6B.59 is a subcomponent of 6B.35 and lines 6B.58 to 6B.67 should sum to the total in 6B.35. For region 1 level reporting line 6B.69 is a subcomponent of 6B.44 and lines 6B.68 to 6B.77 should sum to the total in 6B.44. For region 2 level reporting line 6B.79 is a subcomponent of 6B.53 and lines 6B.78 to 6B.87 should sum to the total in 6B.53. For company level reporting lines 6B.58 and 6B.59 replace the previous line, 'Distribution losses' with the sum of 6B.58 and 6B.69 providing the equivalent 'Distribution losses' figure. For region 2 level reporting lines 6B.78 and 6B.69 replace the previous line, 'Distribution losses' with the sum of 6B.68 and 6B.69 providing the equivalent 'Distribution losses' figure. For region 2 level reporting lines 6B.78 and 6B.79 replace the previous line, 'Distribution losses' with the sum of 6B.68 and 6B.69 providing the equivalent 'Distribution losses' figure.
6B.60 (6B.70, 6B.80)	Customer supply pipe losses – measured households excluding void properties	 Losses on the customer supply pipe of measured household customers. It does not include internal plumbing losses. Reported as a post MLE figure. Use line 6B.60 for company level reporting, line 6B.70 for region 1 level reporting and line 6B.80 for region 2 level reporting. This excludes losses from supply-pipes on void measured household properties which are included below in line 6B.64 for company level reporting, line 6B.74 for region 1 level reporting and line 6B.60 is a subcomponent of 6B.35 and lines 6B.58 to 6B.67 should sum to the total in 6B.35. For region 1 level reporting line 6B.70 is a subcomponent of 6B.44 and lines 6B.68 to 6B.77 should sum to the total in 6B.44. For region 2 level reporting line 6B.80 is a subcomponent of 6B.53 and lines 6B.78 to 6B.87 should sum to the total in 6B.53.

Line	Title	Definition
6B.61 (6B.71, 6B.81)	Customer supply pipe losses – unmeasured households	Losses on the supply pipe of unmeasured household customers. It does not include internal plumbing losses. Reported as a post MLE figure.
	excluding void properties	Use line 6B.61 for company level reporting, line 6B.71 for region 1 level reporting and line 6B.81 for region 2 level reporting.
		This excludes losses from supply-pipes on void unmeasured household properties which are included are included below in line 6B.65 for company level reporting, line 6B.75 for region 1 level reporting and line 6B.85 for region 2 level reporting.
		For company level reporting line 6B.61 is a subcomponent of 6B.35 and lines 6B.58 to 6B.67 should sum to the total in 6B.35.
		For region 1 level reporting line 6B.71 is a subcomponent of 6B.44 and lines 6B.68 to 6B.77 should sum to the total in 6B.44.
		For region 2 level reporting line 6B.81 is a subcomponent of 6B.53 and lines 6B.78 to 6B.87 should sum to the total in 6B.53.
6B.62 (6B.72, 6B.82)	Customer supply pipe losses – measured non-	Losses on the supply pipe of measured non-household customers. It does not include internal plumbing losses. Reported as a post MLE figure.
	households excluding void properties	Use line 6B.62 for company level reporting, line 6B.72 for region 1 level reporting and line 6B.82 for region 2 level reporting.
		This also excludes losses from supply-pipes on void measured non- household properties which are included below in line 6B.66 for company level reporting, line 6B.76 for region 1 level reporting and line 6B.86 for region 2 level reporting.
		For company level reporting line 6B.62 is a subcomponent of 6B.35 and lines 6B.58 to 6B.67 should sum to the total in 6B.35.
		For region 1 level reporting line 6B.72 is a subcomponent of 6B.44 and lines 6B.68 to 6B.77 should sum to the total in 6B.44.
		For region 2 level reporting line 6B.82 is a subcomponent of 6B.53 and lines 6B.78 to 6B.87 should sum to the total in 6B.53.

Line	Title	Definition
6B.63 (6B.73, 6B.83)	Customer supply pipe losses – unmeasured non-households excluding void properties	Losses on the supply pipe of unmeasured non-household customers. It does not include internal plumbing losses. Reported as a post MLE figure. Use line 6B.63 for company level reporting, line 6B.73 for region 1 level reporting and line 6B.83 for region 2 level reporting. This also excludes losses from supply-pipes on void unmeasured non-household properties which are included below in line 6B.67 for company level reporting, line 6B.77 for region 1 level reporting and line 6B.87 for region 2 level reporting. For company level reporting line 6B.63 is a subcomponent of 6B.35 and lines 6B.58 to 6B.67 should sum to the total in 6B.35. For region 1 level reporting line 6B.73 is a subcomponent of 6B.44 and lines 6B.68 to 6B.77 should sum to the total in 6B.44. For region 2 level reporting line 6B.83 is a subcomponent of 6B.53 and lines 6B.78 to 6B.77 should sum to the total in 6B.44.
6B.64 (6B.74, 6B.84)	Customer supply pipe losses – void measured households	Losses on the customer supply pipe of void measured household properties. It does not include internal plumbing losses. Reported as a post MLE figure. Use line 6B.64 for company level reporting, line 6B.74 for region 1 level reporting and line 6B.84 for region 2 level reporting. For company level reporting line 6B.64 is a subcomponent of 6B.35 and lines 6B.58 to 6B.67 should sum to the total in 6B.35. For region 1 level reporting line 6B.74 is a subcomponent of 6B.44 and lines 6B.68 to 6B.77 should sum to the total in 6B.44. For region 2 level reporting line 6B.84 is a subcomponent of 6B.53 and lines 6B.78 to 6B.77 should sum to the total in 6B.44.
6B.65 (6B.75, 6B.85)	Customer supply pipe losses – void unmeasured households	Losses on the customer supply pipe of void unmeasured household properties. It does not include internal plumbing losses. Reported as a post MLE figure. Use line 6B.65 for company level reporting, line 6B.75 for region 1 level reporting and line 6B.85 for region 2 level reporting. For company level reporting line 6B.65 is a subcomponent of 6B.35 and lines 6B.58 to 6B.67 should sum to the total in 6B.35. For region 1 level reporting line 6B.75 is a subcomponent of 6B.44 and lines 6B.68 to 6B.77 should sum to the total in 6B.44. For region 2 level reporting line 6B.85 is a subcomponent of 6B.53 and lines 6B.78 to 6B.77 should sum to the total in 6B.44.

Line	Title	Definition
6B.66 (6B.76, 6B.86)	Customer supply pipe losses – void measured non- households	Losses on the customer supply pipe of void measured non- household properties. It does not include internal plumbing losses. Reported as a post MLE figure. Use line 6B.66 for company level reporting, line 6B.76 for region 1 level reporting and line 6B.86 for region 2 level reporting. For company level reporting line 6B.66 is a subcomponent of 6B.35 and lines 6B.58 to 6B.67 should sum to the total in 6B.35. For region 1 level reporting line 6B.76 is a subcomponent of 6B.44 and lines 6B.68 to 6B.77 should sum to the total in 6B.44. For region 2 level reporting line 6B.86 is a subcomponent of 6B.53 and lines 6B.78 to 6B.77 should sum to the total in 6B.44.
6B.67 (6B.77, 6B.87)	Customer supply pipe losses – void unmeasured non- households	Losses on the customer supply pipe of void unmeasured non- household properties. It does not include internal plumbing losses. Reported as a post MLE figure. Use line 6B.67 for company level reporting, line 6B.77 for region 1 level reporting and line 6B.87 for region 2 level reporting. For company level reporting line 6B.67 is a subcomponent of 6B.35 and lines 6B.58 to 6B.67 should sum to the total in 6B.35. For region 1 level reporting line 6B.77 is a subcomponent of 6B.44 and lines 6B.68 to 6B.77 should sum to the total in 6B.44. For region 2 level reporting line 6B.87 is a subcomponent of 6B.53 and lines 6B.78 to 6B.77 should sum to the total in 6B.44.

1				tribution Ir	iput				
Distribution system		Customers' installations							
	∡	►							
		Water Delivered – billed measured residential	billed r	elivered – neasured siness	Water Delivered – billed unmeasured residential	Water Deliverec billed unmeasu busines	d – red	Water taken legally unbilled	Water taken illegally unbilled
			Water Delivered – billed measured		Water Delivered – billed unmeasured		Water taken unbilled		
			Water	r Delivered –	billed				
Water not	delivered	Water Delivered to customers							
Distribution system	Distribution Losses	Underground supply pipe	Total plumbing losses		Custome	ruse			
operational use		losses	Above ground supply pipe losses	Internal plumbing losses					
	Total	leakage		Cons	umption				

Component analysis as a proportion of distribution input – not to scale

6.6 The proportions entered in lines 6B.8 to 6B.15 should sum to unity. The proportion of water in each source category is a measure of how difficult a company's water is to treat. When classifying the water into one of the categories, the following guidelines should be followed:

Water abstracted from boreholes or springs and pumped directly to a treatment works should be classified as groundwater water.

Water abstracted from a river and transported directly to a treatment works (either by pumping or by gravity) should be classified as river water.

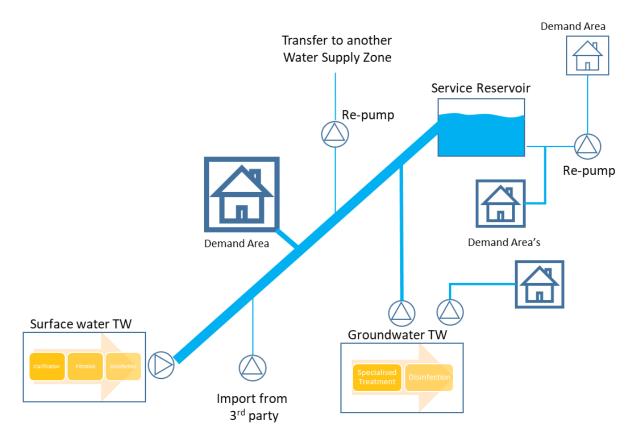
Water that is transported directly to a treatment works from a reservoir which has been filled by a river should be classified as water from reservoirs (this is because, in general, while the water is stored in the reservoir, sediments will settle making the water easier to treat).

Water that is transported from a reservoir, via a river, to a treatment works should be classified as water from a river.

- 6.7 If multiple sources feed a works (for example a river and a number of boreholes) and the flow from these sources is combined prior to treatment, then all of the flow entering the works can be categorised as the more difficult to treat water. (In this example, all of the water would be categorised as river water.)
- 6.8 In lines X to X 'MLE' refers to the maximum likelihood estimation approach used to address any water balance gap. See Ofwat, <u>'Reporting guidance leakage', 2018</u> for further discussion of MLE.
- 6.9 For lines X to X if companies generate a single figure for supply pipe losses on all void properties they should highlight this in their narrative and any assumptions they have made to distribute this loss between the four lines in their reporting.

Guidance for calculating the total number of pumping stations that pump into and within the treated water distribution service (potable water)

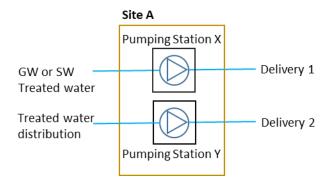
- 6.10 When calculating the number of pumping stations note that this is not the number of individual pumps.
- 6.11 Include all pumping stations that have been operationally available, regardless of whether they have been used in the reporting year, as this applies to all types of pumping stations, not just those lines related to 'proportion of distribution input'.
- 6.12 Do not count more than once where a common source water is pumped to separate pressures at the same site (i.e. high lift and low lift), see example 2
- 6.13 Pumping stations solely for exporting water to a 3rd party are to be excluded, as per appendix A1 of RAG 2 Definition of average pumping head.



Note: Pumping stations solely for exporting to a 3rd party are to be excluded

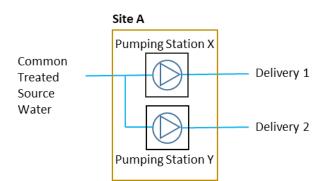
Example 1

This is where a pumping station (Y) that re-pumps water already within the Treated Water Distribution System is located at the same site (A) as a groundwater or surface water pumping station (X). This counts as two pumping stations (one in 31c and one in 31a or b).



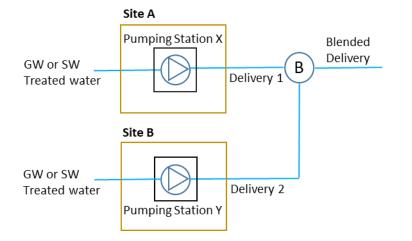
Example 2

This is where multiple pumping stations may be located at the same site where a common source water (groundwater or surface water) is pumped to separate pressures at the same site (i.e. high lift and low lift). This counts as one pumping station.



Example 3

This is where two separate Groundwater or Surface water pumping stations at different sites are blended in treated water distribution. This counts as two pumping stations.



6.14 Pumping stations solely for the exporting water to a 3rd party are to be excluded, as per RAG2 A1.

Pro forma 6C: Water network+ - Mains, communication pipes and other data

Line	Title	Definition
6C.1	Total length of potable mains as at 31 March	The total length of potable water mains on 31 March of report year
6C.2	Total length of potable mains relined	Total length of potable mains relined in report year. Include all spray applied lining.
6C.3	Total length of potable mains renewed	Total length of potable mains renewed in report year. Include mains whose prime purpose is renewal of an existing main, even where existing main remains in service (ie is not abandoned immediately on commissioning of new main). Include mains sleeving/pipe cracking/sliplining where used for this category of work.
6C.4	Total length of new potable mains	Total length of new potable mains laid in report year. Include new mains and mains renewals involving upsizing, whose prime justification is the requirement for additional capacity.
6C.5	Total length of potable water mains (≤ 320mm)	The length of all potable water mains less than or equal to 320mm. Include all elements of trunk and distribution assets and system ancillaries. Include facilities intended for standby and emergency supplies.
6C.6	Total length of potable water mains (>320mm and ≤ 450mm)	The total length of all potable water mains greater than 320mm up to and including 450mm. Include all elements of trunk and distribution assets and system ancillaries. Include facilities intended for standby and emergency supplies.

Line	Title	Definition	
6C.7	Total length of potable water mains (>450mm and ≤610mm)	The total length of all potable water mains greater than 450mm up to and including 610mm. Include all elements of trunk and distribution assets and system ancillaries. Include facilities intended for standby and emergency supplies.	
6C.8	Total length of potable water mains (> 610mm)	The length of all potable water mains greater than 610mm. Include all elements of trunk and distribution assets and system ancillaries. Include facilities intended for standby and emergency supplies.	
6C.9	Total length of potable mains laid or structurally refurbished pre-1880	Total length of potable mains laid or structurally refurbished pre- 1880	
6C.10	Total length of potable mains laid or structurally refurbished between 1881 and 1900	Total length of potable mains laid or structurally refurbished between 1881 and 1900	
6C.11	Total length of potable mains laid or structurally refurbished between 1901 and 1920	Total length of potable mains laid or structurally refurbished between 1901 and 1920	
6C.12	Total length of potable mains laid or structurally refurbished between 1921 and 1940	Total length of potable mains laid or structurally refurbished between 1921 and 1940	
6C.13	Total length of potable mains laid or structurally refurbished between 1941 and 1960	Total length of potable mains laid or structurally refurbished between 1941 and 1960	
6C.14	Total length of potable mains laid or structurally refurbished between 1961 and 1980	Total length of potable mains laid or structurally refurbished between 1961 and 1980	
6C.15	Total length of potable mains laid or structurally refurbished between 1981 and 2000	Total length of potable mains laid or structurally refurbished between 1981 and 2000	
6C.16	Total length of potable mains laid or structurally refurbished between 2001 and 2020	Total length of potable mains laid or structurally refurbished between 2001 and 2020	
6C.17	Total length of potable mains laid or structurally refurbished during and after 2021	Total length of potable mains laid or structurally refurbished during and after 2021	
6C.18	Number of lead communication pipes	The total number of lead communication pipes within the undertaker's supply area.	
6C.19	Number of galvanised iron communication pipes	The total number of galvanised iron communication pipes within the undertaker's supply area.	
6C.20	Number of other communication pipes	The total number of other (excluding lead & galvanised iron) communication pipes within the undertaker's supply area.	

Line	Title	Definition	
6C.21	Number of lead communication pipes replaced or relined for water quality	The total number of lead communication pipes replaced or relined for quality reasons (as a result of the lead quality programme to deal with the revised Drinking Water Regulations). All replacement activity under quality, must have been confirmed by DWI in the schedule of works attached to a legally binding instrument of works. This must be consistent with the programme of work funded under the PR19 for meeting lead standards. Include all lead communication pipes which are replaced at customers' request under Regulation 30(1) of the Water Supply (Water Quality) Regulations 2016.	
6C.22	Company area	Area of company in km ² . No adjustment should be made to take account of areas supplied by NAVs.	
6C.23	Compliance Risk Index	DWI measure of Compliance Risk. The Compliance Risk Index (CRI) is a measure designed to illustrate the risk arising from treated water compliance failures during the previous calendar year. It is calculated by assessment of the: the significance of the parameter failing the standards in the Regulations (the Parameter score); the cause of the failure; the manner of the investigation of the failure by the company; and any mitigation put in place by the company (the Assessment score); and the location of the failure within the supply system taking into account the proportion of the company's consumers affected. See <u>DWI-Compliance-Risk-Index-CRI-definition.pdf</u> (ofwat.gov.uk) for more information	
6C.24	Event Risk Index	DWI measure of Event Risk. The Event Risk Index (ERI) is a measure designed to illustrate the risk arising from water quality events during the previous calendar year. It is calculated by assessment of the: seriousness of the event; company performance in managing the event; impact of the event; and total population served by the company. See <u>DWI-Event-Risk-Index-ERI.pdf</u> for more information.	

Line	Title	Definition
6C.25	Properties below reference level at end of year	The number of properties receiving or at risk of receiving pressure below the reference level. The reference level of service is a flow of 9l/min at a pressure of 10m head on the customer's side of the main stop tap (mst). The reference level applies to a single property. The reference level of service must be applied on the customer's side of a meter or any other company fittings that are on the customer's side of the main stop tap. Where a common service pipe serves more than one property, the flow assumed in the reference level must be
		 one property, the flow assumed in the reference level must be appropriately increased to take account of the total number of properties served. All properties identified as having received pressure or flow below the reference level must be reported, unless it can be confirmed that they are covered by the following exclusions that are set out in more detail in the guidance abnormal demand; one-off incidents; or Low pressure incidents of short duration. The guidance is provided in Properties at risk of receiving low pressure (ofwat.gov.uk)
6C.26	Average time properties are below the reference level	The average time per property that water pressure is below 15 metres head. The company will include all incidents with no exceptions. The company's performance will be measured by all pressure loggers that the company has installed on its network. The number of properties that experience low pressure will be calculated based on ground level difference from the logger. The time that pressure was below the threshold at the logger will be multiplied by the number of properties identified. The sum of these values will be divided by the total number of properties supplied (year end) to calculate the average time per property in hrs:mins:secs. The company should set out the number of pressure loggers installed on its network and their average availability in its commentary.

Pro forma 6D: Demand management– metering and leakage activities

j) Meter definitions

For a definition of basic, automated meter read (AMR) and advanced metering infrastructure (AMI) meters please see section 4R.

- 6.15 For avoidance of doubt the expenditure lines in table 6D should include any allocation of general and support costs to these activities. Any assumptions necessary to derive figures at the level of granularity requested in this table and an associated assessment of confidence in the data should be included in your supporting narrative.
- 6.16 Unless specified otherwise in the line description reporting of lines 6D.1 to 6D.21 should be split by meter type, basic meter, AMR meter or AMI meter.

Line	Title	Definition
6D.1	New optant meter installation for existing customers	Total capital and operating expenditure (excluding cost of providing metering to new service connections) for provision of meters requested by optants during the reporting year. This excludes meters installed at properties with an existing meter installation. These costs do not include costs related to smart meter infrastructure assets such as telemetry. These costs are associated with the meter numbers identified in line 6D.6. We expect companies to explain any variation between the costs reported in this line and line 4L.41 in their supportive narrative.
6D.2	New selective meter installation for existing customers	Total capital and operating expenditure (excluding cost of providing metering to new service connections) for provision of meters introduced by companies during the reporting year (irrespective of whether these meters are used for charging). This excludes meters installed at properties with an existing meter installation. These costs do not include costs related to smart meter infrastructure assets such as telemetry These costs are associated with the meter numbers identified in line 6D.7. We expect companies to explain any variation between the costs reported in this line and line 4L.44 in their supportive narrative.
6D.3	New business meter installation for existing customers	Total capital and operating expenditure (excluding cost of providing metering to new service connections) for provision of new meters for businesses and other non-household customers during the reporting year. This excludes meters installed at properties with an existing meter installation. These costs do not include costs related to smart meter infrastructure assets such as telemetry These costs are associated with the meter numbers identified in line 6D.8. We expect companies to explain any variation between the costs reported in this line and line 4L.47 in their supportive narrative.

Line	Title	Definition	
6D.4	Residential meters renewed	Total capital and operational expenditure for the renewal of existing residential meter installations (basic or smart) with meters during the reporting year. These costs do not include costs related to smart meter infrastructure assets such as telemetry These costs are associated with the meter numbers identified in line 6D.9.	
6D.5	Business meters renewed	Total capital and operational expenditure for renewal of existing business meter installations (basic or smart) with meters during the reporting year. These costs do not include costs related to smart meter infrastructure assets such as telemetry These costs are associated with the meter numbers identified in line 6D.10	
6D.6	New optant meters installed for existing customers	The total number of meters installed at the request of the optants at existing residential properties during the reporting year (including where a company has installed a meter for social tariff purposes). Include meters installed at residential properties fitted in any locatio eg internal, external in garden, external at boundary etc. Exclude al neters installed at the company's behest. For clarity and to avoid possible double counting, this should exclude basic meters installed t properties where the resident subsequently becomes an optant by irtue of switching to measured charges. These meters installed at at properties with an existing meter installation, which is defined as a enewal, and should be recorded in line 6D.9.	
6D.7	New selective meters installed for existing customers	The number of meters installed during the reporting year at existing billed residential properties at the behest of the company (irrespective of whether these meters are used for charging). Include meters installed at residential properties fitted in any location (eg internal, external in garden, external at boundary etc). Exclude all meters installed for meter optants or following property conversions. This excludes meters installed at properties with an existing meter installation, which is defined as a renewal, and should be recorded in line 6D.9.	
6D.8	New business meters installed for existing customers	The number of meters installed during the reporting year at existing business properties. This excludes meters installed at properties with an existing meter installation, which is defined as a renewal, and should be recorded in line 6D.10.	
6D.9	Residential meters renewed	The number of existing residential property meter installations renewed during the reporting year.	
6D.10	Business meters renewed	The number of existing business property meter installations renewed during the reporting year.	
6D.11	Replacement of basic meters with smart meters for residential customers	The number of existing residential customer basic meter installations where meters were upgraded to/or replaced with AMR or AMI meters during the reporting year. Reported separately for AMR and AMI units.	

Line	Title	Definition	
6D.12	Replacement of AMR meters with AMI meters for residential customers	The number of existing residential customer AMR meter installations where meters were upgraded to/or replaced with AMI meters during the reporting year.	
6D.13	Replacement of basic meters with smart meters for business customers	The number of existing business customer basic meter installations where meters were upgraded to/or replaced with AMR or AMI meters during the reporting year. Reported separately for AMR and AMI units.	
6D.14	Replacement of AMR meters with AMI meters for business customers	The number of existing business customer AMR meter installations where meters were upgraded to/or replaced with AMI meters during the reporting year.	
6D.15	New residential meters installed for existing customers – supply- demand balance benefit	The supply-demand balance benefit (demand saving) associated with the installation of the meters defined in lines 6D.6 and 6D.7. The benefit is assumed to be a reduction in consumption and is recorded as a positive figure. Benefits relating to leakage reduction are excluded from this line.	
6D.16	New business meters installed for existing customers – supply- demand balance benefit	The supply-demand balance benefit (demand saving) associated with the installation of the meters defined in line 6D.8 The benefit is assumed to be a reduction in consumption and is recorded as a positive figure. Benefits relating to leakage reduction are excluded from this line.	
6D.17	Replacement of basic meter with smart meters for residential customers – supply- demand balance benefit	The supply-demand balance benefit (demand saving) associated with the upgrade/replacement of existing residential customer basic meter installations to AMR or AMI meters. This relates to the meters defined in line 6D.11. The benefit is assumed to be a reduction in consumption and is recorded as a positive figure. Benefits relating to leakage reduction are excluded from this line.	

Line	Title	Definition	
6D.18	Replacement of AMR meter with AMI meter for residential customers – supply- demand balance benefit	The supply-demand balance benefit (demand saving) associated with the upgrade/replacement of existing residential customer AMR meter installations to AMI meters. This relates to the meters defined in line 6D.12. The benefit is assumed to be a reduction in consumption and is recorded as a positive figure. Benefits relating to leakage reduction are excluded from this line.	
6D.19	Replacement of basic meter with smart meters for business customers – supply- demand balance benefit	The supply-demand balance benefit (demand saving) associated wit the upgrade/replacement of existing business customer basic meter installations to AMR or AMI meters. This relates to the meters defined in line 6D.13. The benefit is assumed to be a reduction in consumption and is recorded as a positive figure. Benefits relating to leakage reduction are excluded from this line.	
6D.20	Replacement of AMR meter with AMI meter for business customers– supply– demand balance benefit	The supply-demand balance benefit (demand saving) associated with the upgrade/replacement of existing business customer AMR meter installations to AMI meters. This relates to the meters defined in line 6D.14. The benefit is assumed to be a reduction in consumption and is recorded as a positive figure. Benefits relating to leakage reduction are excluded from this line.	
6D.21	Residential properties - meter penetration	The percentage of total residential properties that are measured with a water meter. This excludes void properties as no-one is present to use water. Calculated as measured residential properties divided by the sum of measured residential properties (excluding voids) and unmeasured residential properties (excluding voids). This is equivalent to the calculation of 'total household metering penetration (excl. voids)' in water resource management plans.	
6D.22	Total leakage activity	Total capital and operational expenditure for all leakage activities in the reporting year. This should include expenditure associated with all leakage activities to both maintain the existing leakage level and further reduce leakage beyond this point. This is expected to include but not be limited to expenditure on active leakage control, pressure management and mains replacement. For companies reporting leakage enhancement expenditure this will include the expenditure reported in lines 4L.26-28. For all companies the expenditure reported should be split between that allocated to maintaining leakage levels and that allocated to further reducing leakage.	
6D.23	Leakage improvements delivering benefits in 2020-2025	Incremental leakage enhancement delivered during the reporting year to the supply-demand balance. This should be completed by all companies and is calculated as the difference from the previous years 'Total annual leakage' figure reported in 6B.35. Note that because benefits are recorded in this line a reduction in leakage will be reported as a positive number (benefit) and an increase in leakage will be reported as a negative number (dis-benefit). For detail on the reporting of expenditure associated with these benefits see the description of lines 4L.26-28 and 6D.22.	

Line	Title	Definition
6D.24	Per capita consumption (measured)	Estimated per capita consumption of households that are supplied with measured water. This figure applies to billed measured households and excludes underground supply pipe leakage. Underground supply pipe leakage is any loss of water from the underground supply pipe. We expect companies to ensure the classification of properties as either household or non-household is consistent with the retail market definition of eligibility.
6D.25	Per capita consumption (unmeasured)	Estimated per capita consumption of households residential properties that are supplied with unmeasured water. This figure applies to billed unmeasured households and excludes underground supply pipe leakage. Underground supply pipe leakage is any loss of water from the underground supply pipe. We expect companies to ensure the classification of properties as either household or non-household is consistent with the retail market definition of eligibility.

Pro forma 6E: Leakage activity detailed analysis

6.17 We will include our requirements for leakage activity reporting in the PR24 business plan tables where we will collect any additional data necessary for the 2022-23 period building on the data collected to date. This therefore remains as a placeholder for leakage activity reporting beyond PR24.

Pro forma 6F: WRMP annual reporting on delivery - non-leakage activities

Line	Title	Classification and delivery year	Expenditure	Benefits
6F.1- 6F.X	WRMP scheme	'Classification' of water resources management plan (WRMP) schemes delivered should be one of the following four categories; Supply-side improvements delivering benefits in 2020-2025 Demand-side improvements delivering benefits in 2020-2025 (excl leakage and metering) Internal interconnectors delivering benefits in 2020-2025 Supply-demand balance improvements delivering benefits starting from 2026 The delivery year is the year in which the scheme initially provides water resource benefits.	The capital and operating expenditure incurred each year for each scheme delivered as part of the company's water resources management plan (WRMP). Expenditure in millions to three decimal places. Total expenditure to date for each 'classification' should reconcile with the expenditure reported in Table 4L. Any differences in costs, benefits and delivery year to that of the WRMP or business plan should be included in the narrative commentary.	Supply-demand balance benefits for each scheme in megalitres (Ml/d) to one decimal place. For schemes delivering benefits in the 2020-25 period report cumulative benefits delivered in each year e.g. for a supply scheme delivering 7 Ml/d benefits in 2022-23; 7 in 2022-23, 2023-24 and 2024-25. For a demand scheme delivering 2 Ml/d reduction per annum from 2020-21 input 2,4,6,8,10 from 2020-21 to 2024-25. For internal interconnectors list total maximum transfer capacity delivered eg. for a 10 Ml/d interconnector delivered in 2023-24 input 10 Ml/d in 2023-24 and 10 Ml/d in 2024- 25. Length in kilometres to one decimal place, pipe diameter in millimetres to zero decimal places, pipe material (freeform text), pumping capacity in kilowatts to zero decimal places are additionally required to be reported for internal interconnector schemes. For Supply demand balance improvements delivering benefits starting from 2026 the benefits should be recorded in the after 2024-25 column.
6F.X	Total	Not applicable	The sum of lines 6F.1 to 6F.X above.	The sum of lines 6F.1 to 6F.X above. Note the internal interconnector specific elements are not summated.

6.18 We require costs and cost drivers to be reported for every scheme in every year. Annual actual or forecast costs are required and not cumulative costs. Where appropriate the method used to apportion or estimate costs should be set out in table commentary.

- 6.19 Forecast costs to be incurred beyond the reporting year 2024-25 should be given in total in the column 'After 2024-25'. For operating costs, the average annual forecast cost should be given
- 6.20 Forecast benefits incurred beyond the reporting year 2024-25 should be given in total in the column 'After 2024-25'.
- 6.21 For the avoidance of doubt the 'Demand-side improvements' captured in this table exclude the costs and benefits of metering and leakage management that are captured in tables 6C and 6D. Therefore, table 6F should not duplicate these costs and benefits but should record the cost and benefits of other water efficiency activities.
- 6.22 Green recovery schemes should be included in this table and clearly identified as such within the table commentary.

7. Definitions of terms; tables 7A-7F (Additional regulatory information – wastewater network plus)

Pro forma 7A: Wastewater network+ - Functional expenditure for the 12 months ended 31 March 20xx

Line	Title	Definition	
7A.1	Direct costs of STWs in size band 1	Sum of direct costs of STWs in band 1. See additional guidance below for STW banding	
7A.2	Direct costs of STWs in size band 2	Sum of direct costs of STWs in band 2. See additional guidance below for STW banding	
7A.3	Direct costs of STWs in size band 3	Sum of direct costs of STWs in band 3. See additional guidance below for STW banding	
7A.4	Direct costs of STWs in size band 4	Sum of direct costs of STWs in band 4. See additional guidance below for STW banding	
7A.5	Direct costs of STWs in size band 5	Sum of direct costs of STWs in band 5. See additional guidance below for STW banding	
7A.6	General & support costs of STWs in size bands 1 to 5	The sum of general and support expenditure for all STWs in bands 1 to 5 (see additional guidance). Where possible, such expenditure should be attributed on a causal basis; otherwise it should be apportioned in proportion to direct costs.	
7A.7	Functional expenditure of STWs in size bands 1 to 5 (excluding 3 rd party services)	Functional expenditure of STWs in size bands 1 to 5 (excluding 3 rd party services). Calculated as the sum of 7A.1 to 7A.6 inclusive.	
7A.8	Service charges for STWs in size band 6	Sum of service charges (EA / NRW and the Canal & River Trust) for the STWs in band 6. Calculated from Table 7B.11.	
7A.9	Estimated terminal pumping costs size band 6 works	The sum of estimated costs of terminal pumping stations pumping to STWs in band 6 included in the direct costs. Calculated from table 7B.12	
7A.10	Other direct costs of STWs in size band 6	Direct costs of STWs in band 6 which are not included in lines 7A.8 and 7A.9 above.	
7A.11	Direct costs of STWs in size band 6	Total direct costs of STWs in band 6. Calculated as the sum of 7A.8 to 7A.10 inclusive.	
7A.12	General & support costs of STWs in size band 6	Sum of general and support expenditure for all STWs in band 6. Where possible, such expenditure should be attributed on a causal basis; otherwise it should be apportioned in proportion to direct costs. Calculated from 7B.15.	
7A.13	Functional expenditure of STWs in size band 6 (excluding 3 rd party services)	Functional expenditure of STWs in size band 6 (excluding 3 rd party services). Calculated as the sum of 7A.11 and 7A.12.	
7A.14	Total operating functional expenditure (excluding 3 rd party services)	Total operating functional expenditure (excluding 3 rd party services). Calculated as the sum of 7A.7 and 7A.13.	

Functional expenditure

- 7.1 Functional expenditure is defined as operating expenditure excluding both third party costs and Local authority and cumulo rates.
 - 7.2 Companies should prepare functional expenditure taking into account the guidance on improving cost allocation between the sewage treatment and bioresources units in relation to <u>sludge liquors</u>³, <u>energy generation</u>⁴ and <u>overheads</u>⁵.

Treatment works size

- 7.3 For the purpose of these tables, sewage treatment works (STW) size is defined by the load received by the works, expressed as mass (i.e. kilograms of BOD₅ per day). In calculating the size of a works, companies should assume that resident connected population contribute 60g BOD₅/head/day and add the trade effluent load (total COD) using a conversion factor of COD:BOD of 2:1.
- 7.4 No allowance should be made for non-resident population when classifying the size band of a works.
- 7.5 Companies must include non-resident population when reporting loads and costs.
- 7.6 Under this classification scheme, large works are defined as those with an average daily loading >1,500kg BOD₅/day, and small works are those with an average loading <=1,500kg BOD₅/day.

Small works	BOD₅ measure	Population equivalent
Size band 1	<= 15kg BOD5/day	0 - 250
Size band 2	>15 but <= 30kg BOD₅/day	250 - 500
Size band 3	>30 but <= 120kg BOD₅/day	500 – 2,000
Size band 4	>120 but <= 600kg BOD₅/day	2,000 –10,000
Size band 5	>600 but <= 1,500kg BOD₅/day	10,000 – 25,000

³ <u>Reporting-of-sludge-liquor-treatment-costs-final-decisions.pdf (ofwat.gov.uk)</u>

⁴ <u>Bioresources_Cost_Allocation_Energy_Generation_Odour_Control_Final_Decision.pdf (ofwat.gov.uk)</u>

⁵ RAG-2.09---Guideline-for-classification-of-costs-across-the-price-controls.pdf (ofwat.gov.uk)

Large works		Population equivalent
Size band 6	>1,500kg BOD₅/day	>25,000

Pro forma 7B: Wastewater network+ - Large sewage treatment works for the 12 months ended 31 March 20xx

- 7.7 This table relates to Network+ costs only at the treatment works. This means that any costs relating to sludge (also known as the Bioresources price control unit) should be excluded.
- 7.8 Also note that treatment of tankered waste treatment is a non-appointed activity (see appendix 1) and so should not be taken into account when completing lines 7B.3 and 7B.9.

Line	Title	Definition
7B.1	Works name	Name of sewage treatment works
7B.2	Classification of treatment works	Classification of treatment works P = Primary treatment; SAS = Secondary Activated Sludge; SB = Secondary Biological; TA1 = Tertiary A1; TA2 = Tertiary A2; TB1 = Tertiary B1; TB2 = Tertiary B2 Where a works' load is split into two treatment streams, the works should be reported in this line as the higher of the two proportions. For example, a works with a split of 60% Secondary Activated Sludge and 40% Secondary Biological should be classed as Secondary Activated Sludge (SAS) in this line. (Further information on classification of treatment works can be found under Proforma 7D).
7B.3	Population equivalent of total load received	The average equivalent population of the total load received by the treatment works during the report year. Total load will be comprised of both resident and non- resident population loads.
7B.4	Suspended solids consent	The value of the effluent consent standard (95%ile) with respect to suspended solids. This figure must be as determined by the Environment Agency / Natural Resources Wales and not a company's own assessment of the consent standard.
7B.5	BOD₅ consent	The value of the effluent consent standard (95%ile) with respect to BOD ₅ . This figure must be as determined by the Environment Agency / Natural Resources Wales and not a company's own assessment of the consent standard.
7B.8	Ammonia consent	The value of the effluent consent standard (95%ile) with respect to ammonia, if applicable at the works in question. This figure must be as determined by the Environment Agency / Natural Resources Wales and not a company's own assessment of the consent standard.

Line	Title	Definition
7B.7	Phosphorus consent	The value of the effluent consent standard with respect to phosphorus (annual mean), if applicable at the works in question. This figure must be as determined by the Environment Agency / Natural Resources Wales and not a company's own assessment of the consent standard.
7B.8	UV consent	The value of the consent process standard with respect to intensity of UV irradiation, if applicable at the works in question. This figure must be as determined by the Environment Agency / Natural Resources Wales and not a company's own assessment of the consent standard.
7B.9	Load received by STW	The average daily organic load (in kgBOD₅) received by the treatment works during the report year. Calculated on the basis of a contribution of 60g BOD₅ per head of equivalent population per day. Calculated values should agree with those reported in 7D.6.
7B.10	Flow passed to Full Treatment	The average daily flow (in m³/d) passed to full treatment at the treatment works during the report year.
7B.11	Service charges	The total service charges (Environment Agency / Natural Resources Wales and the Canal & River Trust for the STW.
7B.12	Estimated terminal pumping expenditure	The estimated direct cost of terminal pumping stations pumping to the STW.
7B.13	Other direct expenditure	Direct expenditure at the STW (the costs directly attributable to each works) excluding service charges and terminal pumping costs. Where the works also undertakes sludge treatment, the costs associated with sludge treatment should be excluded.
7B.14	Total direct expenditure	Sum of lines 7B.11 to 7B.13.
7B.15	General and support expenditure	The general and support expenditure allocated to each sewage treatment works. Where possible, such expenditure should be allocated on a causal basis; otherwise it should be apportioned in line with direct costs.
7B.16	Functional expenditure	The sum of direct expenditure and general and support expenditure. Sum of lines 7B.14 and 7B.15.

- 7.9 RAG2 sets out how costs should be divided across that price control units. In this table, general and support costs may, where they cannot be directly attributed, require allocation so that the network+ element can be identified.
- 7.10 Companies should follow the guidance in RAG2 to source appropriate cost drivers for allocation.
- 7.11 Companies should prepare functional expenditure taking into account the guidance on improving cost allocation between the sewage treatment and bioresources units in relation to <u>sludge liquors</u>⁶, <u>energy generation</u>⁷ and <u>overheads</u>⁸.

⁶ <u>Reporting-of-sludge-liquor-treatment-costs-final-decisions.pdf (ofwat.gov.uk)</u>

⁷ <u>Bioresources Cost Allocation Energy Generation Odour Control Final Decision.pdf (ofwat.gov.uk)</u>

⁸ <u>RAG-2.09---Guideline-for-classification-of-costs-across-the-price-controls.pdf (ofwat.gov.uk)</u>

Pro forma 7C: Wastewater network+ Sewer and volume data

Line	Title	Definition
7C.1	Connectable properties served by s101A schemes completed in the report year	The number of connectable properties (either identified as "polluting" or "likely to pollute") associated with s101A schemes completed in the report year and for which the capital costs are reported in 4M.47.
7C.2	Number of s101A schemes delivered in the report year	The number of s101A schemes completed in the report year and for which the capital costs are reported in 4M.47.
7C.3	Total pumping station capacity	Total installed pumping capacity of all in-line pumping stations (including standby pumps). Include foul, combined, stormwater and terminal pumping stations and surface water pumping stations that drain directly to receiving waters (rivers etc). Include vacuum pumping stations. Exclude capacity of pumps delivering flows to or from off-line storm tanks, FLIPS devices, sludge pumping stations and inter-stage pumping within a sewage treatment works or sludge treatment centre. Report capacity of all installed pumps (irrespective of the number that may be working at any one time.)
7C.4		
7C.5	C.5 Total number of sewer blockages on the current network (ie sewer blockages blockages blockages blockages blockages aresult of schemes made by the Secretary of Welsh Ministers under the Water Industry (Schemes for Ado Private Sewers) Regulations 2011.)	
7C.6	Total number of gravity sewer collapses	Total number of gravity sewer collapses on the current network (ie. the sewerage network including private sewers and lateral drains transferred as a result of schemes made by the Secretary of State / Welsh Ministers under the Water Industry (Schemes for Adoption of Private Sewers) Regulations 2011.) The count should be consistent with the measure definition in https://www.ofwat.gov.uk/wp-content/uploads/2018/03/20190327-7Sewer-collapses-final-reporting-guidance.pdf (but not normalised by sewer length and excluding rising main bursts).

Line	Title	Definition	
7C.7	Total number of sewer rising main bursts	Total number of rising mains bursts on the current network (ie. the sewerage network including private sewers and lateral drains transferred as a result of schemes made by the Secretary of State / Welsh Ministers under the Water Industry (Schemes for Adoption of Private Sewers) Regulations 2011.) The count should be consistent with the measure definition in <u>https://www.ofwat.gov.uk/wp- content/uploads/2018/03/20190327-7Sewer-collapses-final-reporting</u> <u>guidance.pdf</u> (but not normalised by sewer length and excluding gravit sewer collapses).	
7C.8	Number of combined sewer overflows	The total number of combined sewer overflows - a storm overflow (with no significant settlement) on a gravity sewer, a pumping station or STW inlet.	
7C.9	Number of emergency overflows	The total number of emergency overflows at sewage pumping stations – an emergency overflow does not normally operate in storm conditions but is designed to operate in the event of asset failure ie electrical power failure, mechanical breakdown, rising main failure or blockage downstream. Must not be included if already counted as a CSO in 7C.8 (some overflows are permitted to operate as both an EO and a CSO) ie no overflows should be double counted. All emergency overflows at pumping stations should be included irrespective of whether they are located on the network or at a sewage treatment works.	
7C.10	Number of settled The total number of storm tank overflows - a storm overflow wire storm overflows significant settlement at a STW.		
7C.11	Sewer age profile (constructed post 2001)	Total length of sewer (including rising mains) laid or structurally refurbished post 2001. Reported length should include both legacy assets and formerly private sewers and lateral drains transferred into the company's ownership on (or in the case of rising mains, from) 1 October 2011.	
7C.12	Volume of trade effluent	Total volumes of trade effluent receiving treatment at sewage treatment works.	
7C.13	7C.13Volume of wastewater receiving treatment at sewage treatment at worksCalculated as the flow receiving treatment at sewage reported to the EA in the annual OMA report plus an e additional flow for all remaining works (typically thos equivalent of less than 250). This will include domest effluent, surface and highway drainage and infiltration		
7C.14	Length of gravity sewers rehabilitated	Total length of sewer renovated or replaced in the report year. The length reported is the actual length physically renovated or replaced rather than the distance between the manholes either side of the section of pipe in question.	
7C.15	Length of rising mains replaced or structurally refurbished	Total length of sewer rising mains replaced or structurally refurbished in the report year. The length reported is the actual length physically replaced or structurally refurbished rather than the distance between the manholes either side of the section of pipe in question. The term 'structurally refurbished' is intended to capture any pipeline rehabilitation technique which results in an improvement in the structural integrity of the pipe such that its expected service life has been materially extended. The term has been used in the definition of data items in previous submissions (eg. Table WWn3 Line 15 of the 2018 business plan) and companies should interpret the term in a way that is consistent with such submissions.	

Line	Title	Definition	
7C.16	Length of foul (only) public sewers	Length of gravity foul (only) public sewers on 31 March of report year excluding formerly private sewers transferred into the company's ownership on 1 October 2011.	
7C.17	Length of surface water (only) public sewers	Length of gravity surface water (only) public sewers on 31 March of report year excluding formerly private sewers transferred into the company's ownership on 1 October 2011.	
7C.18	Length of combined public sewers	Length of gravity combined public sewers on 31 March of report year excluding formerly private sewers transferred into the company's ownership on 1 October 2011.	
7C.19	Length of rising mains	Length of rising mains on 31 March of report year excluding formerly private sewers transferred into the company's ownership from 1 October 2011.	
7C.20	 Length of other wastewater network pipework on 31 March of report year excluding formerly private sewers transferred into the comparent network pipework ownership on 1 October 2011 that are not captured in 7C.16 to 7C.1 sludge mains, overflow pipes, etc). 		
7C.21	Total length of "legacy" public sewers as at 31 March		
7C.22	Length of formerly private sewers and lateral drains (s105A sewers)	transferred into the company's ownership on (or in the case of rising	

Pro forma 7D: Wastewater network+ Sewage treatment works data

- 7.12 This table relates to Network+ costs only at the treatment works. This means that any costs relating to sludge (also known as the Bioresources price control unit) should be excluded.
- 7.13 Also note that treatment of tankered waste treatment is a non-appointed activity (see appendix 1) and so should not be taken into account when completing lines 7D.1 to 7D.7.

Line	Title	Definition
7D.1	Load received by STWs in size band 1	Average daily pollution loads received (in kg of BOD ₅ /day) by STWs of size band 1 (<= 15kg BOD ₅ /day) for each category. The convention outlined under the common definitions should be used to calculate the load for each STW. Companies must classify the size band of a works using resident population only. Companies must include non-resident population when reporting loads.

Line	Title	Definition	
7D.2	Load received by STWs in size band 2	Average daily pollution loads received (in kg of BOD ₅ /day) by STWs of size band 2 (15 – 30kg BOD ₅ /day) for each category. The convention outlined under the common definitions should be used to calculate the load for each STW. Companies must classify the size band of a works using resident population only. Companies must include non-resident population when reporting loads.	
7D.3	Load received by STWs in size band 3	Average daily pollution loads received (in kg of BOD ₅ /day) by STWs of size band 3 (30 - 120kg BOD ₅ /day) for each treatment category. The convention outlined under the common definitions should be used to calculate the load for each STW. Companies must classify the size band of a works using resident population only. Companies must include non-resident population when reporting loads.	
7D.4	Load received by STWs in size band 4	Average daily pollution loads received (in kg of BOD ₅ /day) by STWs of size band 4 (120 - 600kg BOD ₅ /day) for each treatment category. The convention outlined under the common definitions should be used to calculate the load for each STW. Companies must classify the size band of a works using resident population only. Companies must include non-resident population when reporting loads.	
7D.5	Load received by STWs in size band 5	Average daily pollution loads received (in kg of BOD ₅ /day) by STWs of size band 5 (600 - 1500kg BOD ₅ /day) for each treatment category. The convention outlined under the common definitions should be used to calculate the load for each STW. Companies must classify the size band of a works using resident population only. Companies must include non-resident population when reporting loads.	
7D.6	Load received by STWs above size band 5	Average daily pollution loads received (in kg of BOD ₅ /day) by STWs above size band 5 (>1500kg BOD ₅ /day) for each treatment category. The convention outlined under the common definitions should be used to calculate the load for each STW. Companies must classify th size band of a works using resident population only. Companies mus include non-resident population when reporting loads. Reported values should agree with those reported in 7B.9.	
7D.7	Total load received	Average daily pollution loads received (in kg of BOD ₅ /day) by STWs of all sizes. Calculated as sum of 7D.1 to 7D.6.	
7D.8	Load received from trade effluent customers at treatment works	Average daily pollution load in kg BOD₅ received by sewage treatment works of all sizes from trade effluent customers.	
7D.9	STWs in size band 1	Number of sewage treatment works of size band 1. (See additional guidance)	
7D.10	STWs in size band 2	Number of sewage treatment works of size band 2. (See additional guidance)	
7D.11	STWs in size band 3	Number of sewage treatment works of size band 3. (See additional guidance)	
7D.12	STWs in size band 4	Number of sewage treatment works of size band 4. (See additional guidance)	
7D.13	STWs in size band 5	Number of sewage treatment works of size band 5. (See additional guidance)	
7D.14	STWs above size band 5	Number of sewage treatment works of size band above size band 5. (See additional guidance)	
7D.15	Total number of STWs	Total number of sewage treatment works of all sizes. Calculated as sum of 7D.9 to 7D.14.	

Line	Title	Definition	
7D.16	Current population equivalent served by STWs	Population equivalent (resident) connected to sewage treatment works. Equivalent population should be calculated on the basis of 60g BOD ₅ per capita per day. Imported effluents should be included in calculation. No account should be taken of holiday population.	
7D.17	Current population equivalent served by STWs with tightened/new P consents	Population equivalent served by biological filter STWs or activated sludge STWs at which new or tightened consent conditions for phosphorus are met by WINP/NEP schemes delivered in the report year, and for which costs are reported in 4M.35-37.	
7D.18	Current population equivalent served by STWs with tightened/new N consents	Population equivalent served by STWs at which new or tightened consent conditions for nitrogen are met by WINP/NEP schemes delivered in the report year and for which costs are reported in 4M.32-34.	
7D.19	Current population equivalent served by STWs with tightened/new sanitary parameter consents	Population equivalent served by STWs at which new or tightened consent conditions for one or more sanitary parameters are met by WINEP/NEP schemes delivered in the report year and for which costs are reported in 4M.38-40.	
7D.20	Current population equivalent served by STWs with tightened/new microbiological treatment consents (for example UV, Ozone etc)	 consent conditions for microbiological parameters to meet the requirements of the EU Shellfish Waters or revised Bathing Water Directives are met by WINEP/NEP schemes delivered in the report year and for which costs are reported in 4M.41-43. 	
7D.21	Population equivalent treatment capacity enhancement	Population equivalent served by sewage treatment works where a scheme has been delivered to enhance / increase treatment capacity. The increase must be measured from the previous year's capacity of existing sewage treatment works and the previous capacity at each works must be the higher of the then current design capacity or the company's revised understanding of actual capacity before the company's action.	
7D.22	Current population equivalent served by STWs with tightened/new consents for chemicals or other hazardous substances	Population equivalent served by STWs at which new or tightened permit conditions for chemicals or other hazardous substances are required by the WINEP/NEP to achieve good chemical status, or to prevent deterioration in chemical status, or to achieve standstill limits for chemicals, delivered in the report year and for which costs are reported in 4M.26-28. Exclude population equivalent served by STWs associated with investigations for which costs are reported in 4M.29-31.	

k) Primary sewage treatment works

Treatment methods are restricted to primary treatment (screening, comminution, maceration, grit and detritus removal, pre-aeration and grease removal, storm tanks,

plus primary sedimentation, including where assisted by the addition of chemicals e.g. Clariflow).

I) Secondary activated works

Sewage treatment works providing secondary activated sludge treatment methods whose treatment methods include those for primary works plus works whose treatment methods include activated sludge (including diffused air aeration, coarse bubble aeration, mechanical aeration, oxygen injection, submerged filters) and other equivalent techniques including deep shaft process, extended aeration (single, double and triple ditches) and biological aerated filters as secondary treatment.

m) Secondary biological works

Sewage treatment works providing secondary biological treatment methods whose treatment methods include those for primary works plus works whose treatment methods include rotating biological contractors and biological filtration (including conventional filtration, high rate filtration, alternating double filtration and double filtration, root zone treatment (where used as a secondary treatment stage).

n) Tertiary activated works

A1 - Works with a secondary activated sludge process whose treatment methods also include prolonged settlement in conventional lagoons or raft lagoons, irrigation over grassland, constructed wetlands, root zone treatment (where used as a tertiary stage), drum filters, microstrainers, slow sand filters, tertiary nitrifying filters, wedge wire clarifiers or Clariflow installed in humus tanks, where used as a tertiary treatment stage.

A2 - Works with a secondary activated sludge process whose treatment methods also include rapid-gravity sand filters, moving bed filters, pressure filters, nutrient removal control using physico-chemical and biological methods, disinfection, hard COD and colour removal, where used as a tertiary treatment stage.

o) Tertiary biological works

B1 – Works with a secondary stage biological process whose treatment methods also include prolonged settlement in conventional lagoons or raft lagoons, irrigation over grassland, constructed wetlands, root zone treatment (where used as a tertiary stage), drum filters, microstrainers, slow sand filters, tertiary nitrifying filters, wedge wire clarifiers or Clariflow installed in humus tanks, where used as a tertiary treatment stage. B2 - Works with a secondary biological process whose treatment methods also include rapid-gravity sand filters, moving bed filters, pressure filters, nutrient removal control using physico-chemical and biological methods, disinfection, hard COD and colour removal, where used as a tertiary treatment stage.

p) Load received by STWs in size band 1

The average daily load received (in kg of BOD₅/day) by STWs of size band 1 (<= 15kg BOD5/day) for each treatment category. The convention outlined under the common definitions should be used to calculate the load for each STW. Companies must classify the size band of a works using resident population only. Companies must include non-resident population when reporting loads.

q) Load received by STWs in size band 2

The average daily load received (in kg of BOD₅/day) by STWs of size band 2 (15 - 30kg BOD₅/day) for each treatment category. The convention outlined under the common definitions should be used to calculate the load for each STW. Companies must classify the size band of a works using resident population only. Companies must include non-resident population when reporting loads.

r) Load received by STWs in size band 3

The average daily load received (in kg of BOD₅/day) by STWs of size band 3 (30 – 120kg BOD₅/day) for each treatment category. The convention outlined under the common definitions should be used to calculate the load for each STW. Companies must classify the size band of a works using resident population only. Companies must include non-resident population when reporting loads.

s) Load received by STWs in size band 4

The average daily load received (in kg of BOD₅/day) by STWs of size band 4 (120 - 600kg BOD₅/day) for each treatment category. The convention outlined under the common definitions should be used to calculate the load for each STW. Companies must classify the size band of a works using resident population only. Companies must include non-resident population when reporting loads.

t) Load received by STWs in size band 5

The average daily load received (in kg of BOD₅/day) by STWs of size band 5 (600 - 1500kg BOD₅/day) for each treatment category. The convention outlined under the common definitions should be used to calculate the load for each STW. Companies

must classify the size band of a works using resident population only. Companies must include non-resident population when reporting loads.

u) Load received by STWs above size band 5

The average daily load received (in kg of BOD₅/day) by STWs above size band 5 (>1500kg BOD₅/day) for each treatment category. The convention outlined under the common definitions should be used to calculate the load for each STW. Companies must classify the size band of a works using resident population only. Companies must include non-resident population when reporting loads.

Pro forma 7E: Wastewater network+ other data including energy consumption and scheme delivery for the 12 months ended 31 March 20XX

Line	Title	Definition
7E.1	Total sewerage catchment area	Total area of sewered catchments. Note: This will be less than the operating area within which company as the sewerage undertaker is licensed to provide sewerage services (owing to the exclusion of unsewered areas).
7E.2	Designated bathing waters (inland and coastal)	Number of designated inland and coastal bathing waters within the company's operating area.
7E.3	Number of intermittent discharge event duration monitors	Number of intermittent discharge event duration monitors installed during the report year. The associated costs are reported in 4M.4-6. No account should be taken of other activity for which costs are also reported in 4M.4-6 eg permit applications.
7E.4	.4 Number of Number of WINEP / NEP flow monitors installed under driver of and U_MON5 in the report year and for which the associated reported in 4M.7-9. STWs	
7E.5	Number of odour related complaints	The total number of complaints received in any format during the year relating to odour from sewerage service assets.
7E.6	Energy consumption - sewage collection	Measure of energy usage (electricity, gas, liquid fuels) by the sewage collection wholesale business unit (irrespective of the power source). Energy usage should be measured as that which is either imported or self-generated and used in relevant business unit. No account should be taken of self- generated energy that is exported from the business unit where it is generated. Fleet transport and standby generation should be included as should an allowance for administrative buildings and head office function.
7E.7	E.7 Energy consumption - sewage treatment wholesale business unit (irrespective of the power so usage should be measured as that which is either imported or so and used in relevant business unit. No account should be taken generated energy that is exported from the business unit where	

		generated. Fleet transport and standby generation should be included as should an allowance for administrative buildings and head office function.		
7E.8	Energy consumption - wastewater network +	Sum of lines 7E.6 and 7E.7.		
7E.9	Cumulative shortfall in FFT addressed by WINEP / NEP schemes to increase STW capacity	Cumulative shortfall in flow to full treatment at STWs being addressed by schemes listed in the WINEP / NEP, which are delivered in the report year and for which costs are reported in 4M.10-12. The reported shortfall should include schemes that increase the flow to full treatment to 3PG + I + 3E but also those where an increase in flow to full treatment is avoided by addressing the requirement "indirectly", for example by reducing infiltration, providing the alternative solution is agreed with the Environment Agency / Natural Resources Wales.		
7E.10	Number of sites with an increase in sewage treatment works capacity delivered to address a shortfall in FFT	Number of sites where an increase sewage treatment works capacity has been delivered to address a shortfall in flow to full treatment, as required in the WINEP/NEP (U_IMP5).		
7E.11	Additional storm tank capacity provided at STWs (grey infrastructure)	The new or additional volume provided to meet a requirement to increase the storm tank capacity to 68 l/hd or to 2 hours retention at max flow into the tanks by schemes delivered in the report year and for which costs are reported in 4M.13-15. Include the additional storm tank capacity avoided by schemes which address the requirement "indirectly", for example by increasing the flow to full treatment, providing the alternative solution is agreed with the Environment Agency / Natural Resources Wales. This line is for WINEP/NEP drivers, including U_IMP6, only. Storage associated with non-WINEP / non-NEP schemes (eg that address 'other' growth schemes) should be excluded.		
7E.12				
7E.13	Additional volume of network storage at CSOs etc to reduce spill frequency (grey infrastructure)	The volume of new or additional storage in the network provided to meet new or tightened spill frequency requirements at CSOs etc, by schemes delivered in the report year and for which costs are reported in 4M.19 to 21. Storage volumes associated with non-WINEP / non-NEP schemes (eg that provided for the prevention of sewer flooding to properties) should be excluded. The volume reported should be the volume required to meet the permit conditions (most commonly the storage volume that must be filled before any discharge takes place), rather than what was actually constructed (which may be different due to factors related to the design or construction).		
7E.14				

	through green infrastructure	
7E.15	Total number of sewage treatment works sites where additional storage has been delivered (grey infrastructure)	Number of STW sites where additional storage has been delivered via grey infrastructure (irrespective of number of tanks delivered per site)
sewage infrastructure requ		Number of STW sites where additional storage has been delivered via grey infrastructure requiring installation of additional pumping (irrespective of number of tanks delivered per site)
7E.17	Number of sewage treatment works benefitting from green infrastructure replacing the need for storm tank storage	Number of STW sites which benefit from green infrastructure (eg nature- based solution) replacing or reducing the need for storm tank storage
7E.18	Number of sites delivering additional network storage (grey infrastructure)	Number of individual sites delivering additional network storage through grey infrastructure.
7E.19	Number of sites delivering additional network storage including pumping (grey infrastructure)	Number of individual sites delivering additional network storage which includes pumping (grey infrastructure)
7E.20	.20 Number of sites delivering additional network storage through green infrastructure	
7E.21	Surface water separation drainage area removed	
7E.22	Number of schemes	Number of individual schemes delivered with tightened or new sanitary parameters (as confirmed in WINEP March 2019 or via PR19 query).

	delivered to meet tightened or new sanitary consents	
7E.23	Number of installations requiring civils for flow monitoring at sewage treatment works	Number of new civils installations for flow monitoring at sewage treatment works. This is where the provision of MCERTs flow monitoring requires new permanent civils structure(s) to be built (for example hydraulic gauging structures – flumes or weirs). This excludes simple installations e.g. standard monitor installations, whereby a monitor is fixed to a chamber with standard fixings or those requiring only minor adjustments / modifications.
7E.24	Number of installations requiring civils for event duration monitoring at intermittent discharges	Number of new civils installations for event duration monitoring at intermittent discharges. This is where the provision of MCERTs event duration monitoring requires new permanent civils structure(s) to be built (for example). This excludes simple installations e.g. standard monitor installations, whereby a monitor is fixed to a chamber with standard fixings or those requiring only minor adjustments / modifications.
7E.25	Number of storm overflows where improvements have been made to reduce harm or reduce spill frequencies	Number of storm overflows / intermittent discharges where improvements have been made to reduce harm and / or spill frequencies (in line companies' commitments in their 2022 river water quality improvement plans).

Pro forma 7F: Wastewater network+ WINEP phosphorus removal scheme costs and cost drivers

Line	Title	Capital expenditure	Operating expenditure	Cost drivers
7F.1- 7F.X	Scheme name and WINEPID reference	The capital expenditure incurred each year for each phosphorus removal scheme required by the Water Industry National Environment Programme (WINEP). Where overall a scheme is designed to achieve other requirements, for example other WINEP requirements or growth, only the proportional allocation to phosphorus removal requirements should be reported. The actual costs incurred in the reporting year should be given.	The operating expenditure incurred each year for each phosphorus removal scheme required by the Water Industry National Environment Programme (WINEP). Where overall a scheme is designed to achieve other requirements, for example other WINEP requirements or growth, only the proportional allocation to phosphorus removal requirements should be reported. The actual costs incurred in the reporting year should be given. Forecast cost should be given for future years beyond 2025 for completed	Relevant cost driver information is required for each scheme listed. The cost driver information should include the design population equivalent (PE) served by the scheme. For example, if the scheme is designed to serve a forecast PE this value should be given and not the current PE of the works. The PE value should be given in full and not in thousands. For treatment schemes, the historical phosphorus permit level for the site, if any, and the new or tightened permit level (mg-P/L) should be given. For sites with no historical permit a N/A should be entered into

Line	Title	Capital expenditure	Operating expenditure	Cost drivers
		Forecast cost should be given for future years.	schemes should be the annual average cost.	the column – cost driver 2 - historical permit level.
				For schemes where the change in permit levels can be achieved through a change/optimisation of the current process without any capital works, 'Yes' should be entered in the column 'cost driver 4 – permit change only'.
				For schemes where flow is transferred to another site for treatment the length of the transfer pipeline and the transfer flow rate should be given. The transferred flow should be the annual average daily flow at the time of commissioning the transfer scheme. In these cases the population equivalent, historic permit and enhanced permit will be populated for the site that is being transferred from.
				For catchment-based schemes, e.g. nutrient balancing, 'Yes' should be entered in the column 'cost driver 5'.
				Companies should provide all additional relevant quantitative cost driver data in the blank columns and provide further explanatory text in the table commentary.
7F.X	Total	The sum of lines 7F.1 to 7F.X above.	The sum of lines 7F.1 to 7F.X above.	

Additional guidance

7.14 We require costs (in 2022-23 prices) and cost drivers to be reported for all schemes with costs incurred since 2019-20. Only schemes reported under 4M.28 and 4M.29 should be reported in table 7F. We do not expect costs in the lines in table 4M and 7F to reconcile due to costs for schemes started before 2019-20 being reported in table 4M.

- 7.15 Annual actual or forecast costs are required and not cumulative costs. This value should be the incremental, proportional allowance to the phosphorus removal scheme on a site. The method used to apportion or estimate costs should be set out in table commentary.
- 7.16 For the avoidance of doubt, the historical permit level should be that prior to the enhancement, and not the permit level in 2020.
- 7.17 If for any reason a company is not able to provide the required data, the data field should be left blank. It should not be completed with a zero. Companies are expected to provide all requested data and a justification for including blank fields should be given in table commentary.
- 7.18 Forecast costs to be incurred beyond the reporting year 2024–25 should be given in total in the column 'After 2025'. For operating costs, the average annual forecast cost should be given.
- 7.19 Where a company has a single phosphorus removal scheme in WINEP that is made up of works over multiple sites and also includes undertaking associated interventions within the catchment as part of the single scheme, it should report all relevant information on each site or catchment area as separate line. The same WINEP reference will enable linking of the parts of the scheme. For the catchment-based intervention relevant quantitative cost drivers can be included in the column provided and other further explanatory text included in table commentary.
- 7.20 Where a company has a scheme which delivers multiple WINEP requirements, e.g. delivering on two phosphorus drivers with varying permit levels, companies should insert a single row in the table (identifying both IDs in the 'Scheme name and WINEPID reference' cell) and completing the other fields with the most stringent permit level.
- 7.21 For sites included within catchment permitting schemes the details of the sitespecific phosphorus permit should be given in the relevant cost driver columns. Information relating to stretch targets, and further explanatory text, should be provided in table commentary
- 7.22 Green recovery schemes should be included in this table and clearly identified as such within the table commentary.

Examples

7.23 The following 3 examples show how the table should be populated for 2023-24.

Scheme 1 was constructed between 2022 to 2024 with a total capital cost of £250,000. The site was fully commissioned and entered service part way through 2023 and has an annual opex cost of £10,000. The site serves a population equivalent of 100,000 and the phosphorus permit will change from 1 mg/L to 0.5 mg/L.

For scheme 2 construction was started in 2023 but not expected to complete until 2025. The total forecast scheme capital cost is £250,000 and £50,000 has been incurred in 2023-24. When the site enters service in 2025 it will have an estimated annual opex cost of £10,000. The site serves a population equivalent of 100,000. The site has not had a consent in the past and the scheme will meet an enhanced permit of 0.5 mg/L. Included in the table commentary is a description of the scheme solution: a constructed wetland covering 0.5 hectares.

For scheme 3 construction was started in 2023 but not expected to complete until 2027. The total forecast scheme capital cost is £250,000. In 2023-24, \pounds 50,000 has been incurred and it is expected £100,000 will be incurred in 2024-25 and the remainder after 2025. When the site enters service at the end of 2027 it will have an estimated annual opex cost of £10,000. The site serves a population equivalent of 100,000 and the phosphorus permit will change from 2 mg/L to 0.2 mg/L.

Scheme 4 was constructed in 2022-23 for a capital cost of \pm 500,000 and an annual opex cost of \pm 20,000. The scheme is to close an existing site with a population equivalent of 250 and transfer the flow, estimated to be 50 m3/d, via rising main and up-rated gravity sewer of a total length of 3km. The receiving works can accommodate the flow at no additional material cost. The site the flow is transferred from would otherwise have had a phosphorus permit change from 1 mg/L to 0.5 mg/L.

Example table 7F for four example schemes

Pro forma 7F

Select company

									Waste	water I	networ	k+ - WINE	P phospho	orus remo	val schem	e costs an	d cost driver	s									
	Capital expenditure Operating expenditure				Capital expenditure				Cc driv	ost /er 1	Cost driver 2	Cost driver 3	Cost driver 4	Cost driver 5	Cost driver 6	Cost driver 7	Cost driver 8	Cost driver 9									
Scheme name and WINEPID reference	Units	DPs	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	After 2024-25		2019-20	2020-21	2021-22	2022-23	2023-24	2024-225	After 2024-25	Scheme design	pula	Historical permit level for phosphorus	Enhanced permit level for phosphorus	Permit change only (Y/N)	Catchment-based solution (Y/N)	Length of transfer pipeline (km)	Transferred flow (cu.m/d)	Company specific	Company specific
	1																										
Scheme 1 - ABC001	£m	3	0.000	0.000	0.000	0.100	0.150	0.000	0.000		0.000	0.000	0.000	0.000	0.005	0.010	0.010	Se 100	,000	1.000	0.500	N	N	N/A	N/A		
Scheme 2 - DEF002	£m	3	0.000	0.000	0.000	0.000	0.050	0.200	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.010	Se 100	,000	N/A	0.500	N	N	N/A	N/A		
Scheme 3 - GHI003	£m	3	0.000	0.000	0.000	0.000	0.050	0.100	0.100		0.000	0.000	0.000	0.000	0.000	0.000	0.010	Se 100	,000	2.000	0.200	N	N	N/A	N/A		
Scheme 4 - JKL004	£m	3	0.000	0.000	0.000	0.500	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.020	0.020	0.020	Se 2	50	1.000	0.500	N	N	3.000	50.000		

8. Definitions of terms; tables 8A-8D (Additional regulatory information – bioresources)

Pro forma 8A: Bioresources sludge data for the 12 months ended 31st March 20xx

Line	Title	Definition
8A.1	Total sewage sludge produced, treated by incumbents	This is a measure of all the untreated sewage sludge (primary, secondary, tertiary) produced by in-area wastewater treatment processes in the report year which is either treated by the incumbent or remains untreated prior to disposal. Grit and screenings removed through preliminary treatment processes should be excluded. Cross-border imports should be excluded. Sludge treated by managed contractors should be included; sludge treated by separate 3 rd party service providers should be reported in 8A.2.
8A.2	Total sewage sludge produced, treated by 3rd party sludge service provider	This is a measure of all the untreated sewage sludge (primary, secondary, tertiary) produced by in-area wastewater treatment processes in the report year which is treated by a 3rd party sludge service provider. Grit and screenings removed through preliminary treatment processes should be excluded. Cross- border imports should be excluded. Sludge treated by managed contractors (as opposed to separate 3 rd party service providers) should be excluded; instead it should be reported in 8A.1.
8A.3	Total sewage sludge produced	To be entered as the sum of 8A.1 and 8A.2.
8A.4	Total sewage sludge produced from non- appointed liquid waste treatment	This is an estimate of all the untreated sewage sludge (primary, secondary, tertiary) produced by in-area wastewater treatment processes in the report year, and which is produced as a result of treating non-appointed liquid wastes through appointed wastewater treatment assets. Because this sludge is generated at in-area wastewater treatment sites we expect this quantity to be included in the total given in 8A.3. Crossborder imports should be excluded.
8A.5	Percentage of sludge produced and treated at a site of STW and STC co-location	The percentage of the sludge quantity reported in 8A.3 that is produced at co-located sites. For the purposes of this definition: i) "co-located" includes sites where the STC is physically separate but the sludge is transferred from a wastewater treatment site by pipeline, and ii) STC means any site where sludge is treated to a standard such that it can be recycled to the environment or disposed of without any further treatment. Note that sludge that is dewatered but disposed of without being treated should not be included in this line.

Line	Title	Definition
8A.6	Total sewage sludge disposed by incumbents	The total amount of sewage sludge treated and disposed of during the report year by the incumbent expressed in thousands of tonnes of dry solids of sludge disposed by the whole service. This should include recycling to farmland (irrespective of whether spreading is undertaken by the 3 rd party service provider or the farmer) and disposal to landfill, incineration, land restoration / reclamation, composting and other routes. This will be different from sewage sludge produced due to: quantities of lime used in lime treated sludge, losses of volatile solids in the treatment process, and changes in the amount of stockpiled sludge. Sludge disposed of by managed contractors should be included; sludge disposed of by separate 3 rd party service providers should be reported in
8A.7	Total sewage sludge disposed by 3rd party sludge service provider	 8A.7. The total amount of sewage sludge treated and disposed of during the report year by a 3rd party sludge service provider expressed in thousands of tonnes of dry solids of sludge produced by the whole service. This should include recycling to farmland (irrespective of whether spreading is undertaken by the 3rd party service provider or the farmer) and disposal to landfill, incineration, land restoration / reclamation, composting and other routes. This may be different from sewage sludge produced due to: quantities of lime used in lime treated sludge, losses of volatile solids in the treatment process, and changes in the amount of sludge stockpiled at sludge treatment centres. Sludge disposed of by managed contractors (as opposed to separate 3rd party service providers) should be excluded; instead it should be reported in line 8A.6.
8A.8	Total sewage sludge disposed	To be entered as the sum of 8A.6 and 8A.7.
8A.9	Total measure of intersiting 'work' done by pipeline	Total work done in intersiting sludge operations by pipeline during the report year measured as the product of sludge mass (in ttds) multiplied by distance conveyed (in km). Based on actual length of pipeline from sludge holding tanks to STC, not straight-line distance. This measure should not include sludge transported between STWs via a gravity sewer, the operating costs of which are allocated to Network+. For the purposes of this line, 'intersiting' means the conveyance of sludge between physically separate sites that are connected by a sludge pumping main. (km1*tds1)+(km2*tds2)+(kmN*tdsN)

by tankerttds) multiplied by distance travelled (in km) in transporting the sludge Based on actual distance travelled from sludge holding tanks to STC, n straight-line distance. Work done by other forms of transport of liquid sludge (eg tractors) should be included in this line. This measure shou exclude the distance travelled by vehicles to the sewage treatment wo to collect the sludge. No account should be taken of distance travelled (in transporting the sludge. No account should be taken of distance travelled intersiting 'work' done by truck8A.11Total measure of intersiting 'work' done by truckTotal work done in intersiting sludge operations carried out by truck during the report year measured as the product of sludge mass (in ttds multiplied by distance travelled (in km) in transporting the sludge. Bas on actual distance travelled from sludge holding tanks to STC, not straight-line distance. This measure should exclude the distance travelled by vehicles to the sewage treatment work to collect the sludg No account should be taken of distance travelled by empty tankers. (km1*tds1)+(km2*tds2)+(kmN*tdsN)8A.12Total measure of intersiting 'work' done (all forms of transportation)Total work done in intersiting sludge operations carried out by road tanker during the report year measured as the product of sludge volum (in m ³) multiplied by distance travelled from sludge holding tanks to STC, no straight-line distance. Work done by other forms of transport of liquid sludge (eg tractors) should be included in this line. This measure should be included in this line. This measure shoul based on actual distance travelled (in km) in transporting the sludge. Based on actual distance travelled from sludge holding tanks to STC, m straight-line distance. Work done by other forms of transport of liquid sludge (Line	Title	Definition
8A.11 Total measure of intersiting 'work' done by truck Total work done in intersiting sludge operations carried out by truck during the report year measured as the product of sludge mass (in ttds multiplied by distance travelled (in km) in transporting the sludge. Bass on actual distance travelled from sludge holding tanks to STC, not straight-line distance. This measure should exclude the distance travelled by vehicles to the sewage treatment works to collect the sludd. No account should be taken of distance travelled by empty tankers. (km1*tds1)+(km2*tds2)+(kmN*tdsN) 8A.12 Total measure of intersiting 'work' done (all forms of transportation) Total work done in intersiting sludge operations carried out by road tanker during the report year measured as the product of sludge volute transportation) 8A.13 Total measure of intersiting 'work' done by tanker (by volume transported) Total work done in intersiting sludge operations carried out by road tanker during the report year measured as the product of sludge volute to sludge volume (in m ²) multiplied by distance travelled (in km) in transporting the sludge. Based on actual distance travelled from sludge holding tanks to STC, more straight-line distance. Work done by other forms of transport of liquid sludge (eg tractors) should be included in this line. This measure shou exclude the distance travelled by vehicles to the sewage treatment work to collect the sludge. No account should be taken of distance travelled empty tankers. (km1*m ³ 1)+(km2*m ³ 2)+(kmN*m ³ N) 8A.14 Total measure of 'work' Total work done in sludge disposal operations carried out by pipeline (et more spont of 'work')	8A.10	intersiting 'work' done	tanker during the report year measured as the product of sludge mass (in ttds) multiplied by distance travelled (in km) in transporting the sludge. Based on actual distance travelled from sludge holding tanks to STC, not straight-line distance. Work done by other forms of transport of liquid sludge (eg tractors) should be included in this line. This measure should exclude the distance travelled by vehicles to the sewage treatment works to collect the sludge. No account should be taken of distance travelled by empty tankers.
 intersiting 'work' done by truck during the report year measured as the product of sludge mass (in ttds multiplied by distance travelled (in km) in transporting the sludge. Bas on actual distance travelled from sludge holding tanks to STC, not straight-line distance. This measure should exclude the distance travelled by vehicles to the sewage treatment works to collect the slud No account should be taken of distance travelled by empty tankers. 8A.12 Total measure of intersiting 'work' done (all forms of transportation) 8A.13 Total measure of intersiting 'work' done by tanker (by volume transported) Total work done in intersiting sludge operations carried out by road tanker during the report year measured as the product of sludge volum (in m³) multiplied by distance travelled (in km) in transporting the sluce Based on actual distance travelled from sludge holding tanks to STC, no straight-line distance. Work done by other forms of transport of liquid sludge (eg tractors) should be included in this line. This measure shou exclude the distance travelled by vehicles to the sewage treatment wo to collect the sludge. No account should be taken of distance travelled empty tankers. (km1*m³1)+(km2*m³2)+(kmN*m³N) 8A.14 Total measure of 'work' Total work done in sludge disposal operations carried out by pipeline (et an sludge disposal operations carri	8A.11	Total measure of	
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8A.14 Total measure of 'work' Total work done in sludge disposal operations carried out by pipeline (e	8A.13	intersiting 'work' done by tanker (by volume	tanker during the report year measured as the product of sludge volume (in m ³) multiplied by distance travelled (in km) in transporting the sludge. Based on actual distance travelled from sludge holding tanks to STC, not straight-line distance. Work done by other forms of transport of liquid sludge (eg tractors) should be included in this line. This measure should exclude the distance travelled by vehicles to the sewage treatment works to collect the sludge. No account should be taken of distance travelled by
disposal operations by product of sludge mass (in ttds) multiplied by distance travelled (in km pipeline Based on actual distance travelled from the STC to the landbank, landf	8A.14	done in sludge disposal operations by	Total work done in sludge disposal operations carried out by pipeline (eg transport to an incinerator) during the report year measured as the product of sludge mass (in ttds) multiplied by distance travelled (in km). Based on actual distance travelled from the STC to the landbank, landfill site, land reclamation site or incinerator as appropriate, not straight-line distance.
(km1*tds1)+(km2*tds2)+(kmN*tdsN)			(km1*tds1)+(km2*tds2)+(kmN*tdsN)

Line	Title	Definition
8A.15	Total measure of 'work' done in sludge disposal operations by tanker	Total work done in sludge disposal operations carried out by road tanker during the report year measured as the product of sludge mass (in ttds) multiplied by distance travelled (in km) in transporting the sludge. Based on actual distance travelled from the STC to the landbank, landfill site or land reclamation site as appropriate, not straight-line distance. Work done by other forms of transport of liquid sludge (eg tractors) should be included in this line. No account should be taken of distance travelled by empty tankers. (km1*tds1)+(km2*tds2)+(kmN*tdsN)
8A.16	Total measure of 'work' done in sludge disposal operations by truck	Total work done in sludge disposal operations carried out by truck during the report year measured as the product of sludge mass (in ttds) multiplied by distance travelled (in km) in transporting the sludge. Based on actual distance travelled from the STC to the landbank, landfill site or land reclamation site as appropriate, not straight-line distance. No account should be taken of distance travelled by empty tankers. (km1*tds1)+(km2*tds2)+(kmN*tdsN)
8A.17	Total measure of 'work' done in sludge disposal operations (all forms of transportation)	The sum of lines 8A.14 to 8A.16.
8A.18	Total measure of 'work' done by tanker in sludge disposal operations (by volume transported)	Total work done in sludge disposal operations carried out by road tanker during the report year measured as the product of sludge volume (in m ³) multiplied by distance travelled (in km) in transporting the sludge. Based on actual distance travelled from the STC to the landbank, landfill site or land reclamation site as appropriate, not straight-line distance. Work done by other forms of transport of liquid sludge (eg tractors) should be included in this line. No account should be taken of distance travelled by empty tankers. (km1 [*] m ³ 1)+(km2 [*] m ³ 2)+(kmN [*] m ³ N)
8A.19	Chemical P sludge as percentage of sludge produced at STWs	The total quantity of sludge produced at wastewater treatment works which use chemical dosing for phosphorus removal expressed as a percentage of total sludge produced at all in-area sewage treatment works (reported in 8A.3)

8.1 For the purposes of reporting quantities of sludge produced (lines 8A.1 to 8A.3), this is measured ideally at the boundary between the Network plus and Bioresources business units as defined in RAG 4 or if not, at the point of treatment. There should be continuous measurement via instrumentation rather than by composite or spot sampling. Where both the incumbent and a 3rd party service provider undertake different stages of sludge treatment eg dewatering followed by lime stabilisation, sludge quantities should not be doubled-counted and should be reported either in line 8A.1 or line 8A.2, not both.

8.2 For the purposes of reporting against lines 8A.5 and 8A.6, sludge disposal operations for sludge recycled to farmland are assumed to end upon arrival at the field. Accordingly, no account need be taken of changes in the quantity of sludge stored in field piles when completing these lines.

Pro forma 8B: Bioresources operating expenditure analysis for the 12 months ended 31 March 20xx

- 8.3 In this proforma the data is presented in 3 separate blocks. In companies' published APRs they may wish to combine this into a single table, particularly if not all of the columns are relevant for that company.
- 8.4 Companies should prepare operating expenditure taking into account the guidance on improving cost allocation between the sewage treatment and bioresources units in relation to <u>sludge liquors</u>⁹, <u>energy generation</u>¹⁰ and <u>overheads</u>¹¹.

Sludge transport	Sludge treatment	Sludge disposal	Title	Definition
8B.1	8B.11	8B.21	Power	All energy costs, including the climate change levy and the carbon reduction commitment. Any cost savings from power generated
				internally should be netted off these costs.
8B.2	8B.12	8B.22	Income treated as negative expenditure	Income received sales which are external to the appointed business and which directly relate to the wastewater processes. It should be input as a negative number. This will include; Electricity sales from sources such as Hydro, PV, wind and CHP to external parties. Electricity sales from back-up generators under arrangements such as the National Grid 'STOR', "frequency response" and "dynamic demand". Bio-methane gas sales to the National Grid. Sludge and sludge products such as cake, granules etc. to external parties.
8B.3	8B.13	8B.23	Discharge consents	Total cost of discharge consents by the Environment Agency / Natural Resources Wales or the Canal & River Trust.
8B.4	8B.14	8B.24	Bulk discharge	Total payments for bulk discharges.

⁹ <u>Reporting-of-sludge-liquor-treatment-costs-final-decisions.pdf (ofwat.gov.uk)</u>

¹⁰ <u>Bioresources_Cost_Allocation_Energy_Generation_Odour_Control_Final_Decision.pdf (ofwat.gov.uk)</u>

¹¹ RAG-2.09----Guideline-for-classification-of-costs-across-the-price-controls.pdf (ofwat.gov.uk)

Sludge transport	Sludge treatment	Sludge disposal	Title	Definition
8B.5	8B.15	8B.25	Renewals expensed in year (Infrastructure)	Infrastructure renewals which are expensed rather than capitalised in the statutory accounts. 'Renewals' are generally planned activities to replace significant lengths of pipework or parts of an asset. These are targeted at improving network performance or solving ongoing problems and restores an asset to full capability.
8B.6	8B.16	8B.26	Renewals expensed in year (non- Infrastructure)	Non-infrastructure renewals which are expensed rather than capitalised in the statutory accounts. 'Renewals' are generally planned activities targeted at improving network performance or solving ongoing problems and restores an asset to full capability.
8B.7	8B.17	8B.27	Other operating expenditure excluding renewals	Other operating costs not included in previous lines; 8B.1 to 8B.6 (S tran) 8B.11 to 8B.16 (S treat) 8B.21 to 8B.26 (S disp)
8B.8	8B.18	8B.28	Total functional expenditure	The sum of lines; 8B.1 to 8B.7 (S tran) 8B.11 to 8B.17 (S treat) 8B.21 to 8B.27 (S disp)
8B.9	8B.19	8B.29	Local authority and Cumulo rates	The cost of local authority rates. This should include both the local authority rates and cumulo rates.
8B.10	8B.20	8B.30	Total operating expenditure (excluding 3rd party)	Total operating expenditure excluding 3rd party costs recorded in table 4E. The sum of lines; 8B.8 to 8B.9 (S tran) 8B.18 to 8B.19 (S treat) 8B.28 to 8B.29 (S disp)

Pro forma 8C: Bioresources energy and liquors analysis for the 12 months ended 31 March 20xx

Line	Title	Definition
8C.1	Energy consumption - bioresources	Measure of energy usage (electricity, gas, liquid fuels) by the bioresources wholesale business unit (irrespective of the power source). Energy usage should be measured as that which is either imported or self-generated and used in relevant business unit. No account should be taken of self-generated energy that is exported from the business unit where it is generated. Fleet transport and standby generation should be included as should an allowance for administrative buildings and head office function.

Line	Title	Definition			
8C.2	Energy generated by and used in bioresources control	The energy that is generated by undertaking activities within the bioresources price control and which is subsequently used within the bioresources control. To be reported in MWh and an equivalent monetar value. The monetary value should exclude any income from renewable energy incentives.			
8C.3	Energy generated by bioresources and used in network plus control	The energy that is generated by undertaking activities within the bioresources price control and which is subsequently used within the wastewater network plus price controls. To be reported in MWh and an equivalent monetary value. The monetary value should exclude any income from renewable energy incentives.			
8C.4	Energy generated by bioresources and exported to the grid or third party	The energy that is generated by undertaking activities within the bioresources price control and which is subsequently exported to the national grid or a third party (including non-appointee businesses). To be reported in MWh and an equivalent monetary value. The monetary value should exclude any income from renewable energy incentives. Companies who export raw biogas to another company or associate should use the biomethane column to record biogas production and income from the sale of that biogas.			
8C.5	Energy generated by bioresources that is unused	The energy that is generated by undertaking activities within the bioresources price control and which is subsequently unused by the incumbent, third parties or the national grid. To be reported in MWh.			
8C.6	Energy bought from grid or third party and used in bioresources control	The amount of energy that is purchased from the national grid or another third party and subsequently used within the bioresources price control. To be reported in MWh and an equivalent monetary value.			
8C.7	Income claimed from Renewable Energy Certificates (ROCs)	The total income received from Renewable Energy Certificates that apply to bioresources assets.			
8C.8	Income claimed from Renewable Heat Incentives (RHIs)	The total income received from Renewable Heat Incentives that apply to bioresources assets.			
8C.9- 8C.11	Income claimed from [other renewable energy subsidy]	The total income received from renewable energy subsidies that are not Renewable Energy Certificates and Renewable Heat Incentives that apply to bioresources assets. Companies should replace [other renewable energy subsidy] in the line description with the specific subsidy that is being referenced.			
8C.12	Total income claimed from renewable energy subsidies	This is the sum of lines 8C.7 – 8C.11.			
8C.13	% of total number of renewable energy subsidies due to expire in the next 2 financial years	The percentage of the total number of renewable energy subsidies claimed by the company that are due to expire within the next two financial years.			
8C.14	This year's value of renewable energy subsidies due to expire in the next 2 financial years	The total value of the number of renewable energy subsidies claimed by the company that are due to expire within the next two financial years.			

Line	Title	Definition
8C.15	BOD load of liquor or partially treated liquor returned from bioresources to network plus	The biochemical oxygen demand load of sludge liquor or partially treated liquor (ie 'settled BOD') returned from bioresources to network plus in units of kilogram per day (kg BOD ₅ /d). This value is to be shadow reported throughout AMP 7.
8C.16	Ammonia load of liquor or partially treated liquor returned from bioresources to network plus	The ammonia load of sludge liquor or partially treated liquor returned from bioresources to network plus in units of kilogram ammonia nitrogen per day (kg NH4-N/d). This value is to be shadow reported throughout AMP 7.
8C.17	Recharge to Bioresources by network plus for costs of handling and treating bioresources liquors	The total recharge to the bioresources price control form the wastewater network plus price control for the costs of handling and treating sludge liquors. This should be the total recharge at the company level in £m, determined by use of the standard methodology for liquor treatment costs. This value is to be shadow reported throughout AMP 7. Companies should also continue to report the costs of liquor treatment using their current quantification method in table 4E, as per previous years.
8C.18	Energy consumption - bioresources	This line should be shadow reported in AMP 7, based on the guidance for the allocation of revenues / costs associated with energy generation in the bioresources control, as set out in RAG 2. Measure of energy usage (electricity, gas, liquid fuels) by the bioresources wholesale business unit (irrespective of the power source). Energy usage should be measured as that which is either imported or self-generated and used in relevant business unit. No account should be taken of self-generated energy that is exported from the business unit where it is generated. Fleet transport and standby generation should be included as should an allowance for administrative buildings and head office function.
8C.19	Energy generated by and used in bioresources control	This line should be shadow reported in AMP 7, based on the guidance for the allocation of revenues / costs associated with energy generation in the bioresources control, as set out in RAG 2. The energy that is generated by undertaking activities within the bioresources price control and which is subsequently used within the bioresources control. To be reported in MWh and an equivalent monetary value. The monetary value should exclude any income from renewable energy incentives.
8C.20	Energy generated by bioresources and used in network plus control	This line should be shadow reported in AMP 7, based on the guidance for the allocation of revenues / costs associated with energy generation in the bioresources control, as set out in RAG 2. The energy that is generated by undertaking activities within the bioresources price control and which is subsequently used within the wastewater network plus price controls. To be reported in MWh and an equivalent monetary value. The monetary value should exclude any income from renewable energy incentives.

Line	Title	Definition
8C.21	Energy generated by bioresources and exported to the grid or third party	This line should be shadow reported in AMP 7, based on the guidance for the allocation of revenues / costs associated with energy generation in the bioresources control, as set out in RAG 2.
		The energy that is generated by undertaking activities within the bioresources price control and which is subsequently exported to the national grid or a third party (including non-appointee businesses). To be reported in MWh and an equivalent monetary value. The monetary value should exclude any income from renewable energy incentives. Companies who export raw biogas to another company or associate should use the biomethane column to record biogas production and
		income from the sale of that biogas.
8C.22	Energy generated by bioresources that is unused	This line should be shadow reported in AMP 7, based on the guidance for the allocation of revenues / costs associated with energy generation in the bioresources control, as set out in RAG 2.
		The energy that is generated by undertaking activities within the bioresources price control and which is subsequently unused by the incumbent, third parties or the national grid. To be reported in MWh.
8C.23	Energy bought from grid or third party and used in bioresources control	This line should be shadow reported in AMP 7, based on the guidance for the allocation of revenues / costs associated with energy generation in the bioresources control, as set out in RAG 2.
		The amount of energy that is purchased from the national grid or another third party and subsequently used within the bioresources price control. To be reported in MWh and an equivalent monetary value.
8C.24	Percentage of bioresources energy consumption that is metered	The percentage of energy consumption in bioresources that is metered, as opposed to being estimated.

- 8.5 For 8C.1 8C.5 and 8C.18 8C.22 the heat column refers to all heat generated within the bioresources control. Companies should only include energy generation from assets in the regulated business; non-regulated assets such as solar panels that are owned by an associated company should not be included.
- 8.6 For used heat, companies should provide an estimate of the amount and value/cost of the heat generated and used to heat digesters or raise steam. Unused heat refers to an estimate of the amount and value of heat that is generated but wasted, for example heat generated by CHP engines that is not required for warming digesters during the summer.

Pro forma 8D: Bioresources sludge treatment and disposal data for the 12 months ended 31st March 20xx

Line	Title	Definition
8D.1	% Sludge - untreated	Percentage of sludge produced which is untreated prior to disposal
8D.2	% Sludge treatment process - raw sludge liming	Percentage of sludge produced which is untreated other than by liming
8D.3	% Sludge treatment process - conventional AD	Percentage of sludge produced which is treated by conventional AD (with or without liming)
8D.4	% Sludge treatment process - advanced AD	Percentage of sludge produced which is treated by advanced AD (with or without liming). (THP, EH, two- stage + PAS and APD)
8D.5	% Sludge treatment process - incineration of raw sludge	Percentage of sludge produced which is untreated other than by incineration
8D.6	% Sludge treatment process - other (specify)	Percentage of sludge produced by other treatment type(s) (to be specified)
8D.7	% Sludge treatment process - Total	Calculated as the sum of 8D.1 to 8D.6 The totals for the incumbent and 3 rd party service provider columns should sum to 100%
8D.8	% Sludge disposal route - landfill, raw	Percentage of (un-incinerated) sludge by disposal route - landfill, raw
8D.9	% Sludge disposal route - landfill, partly treated	Percentage of (un-incinerated) sludge by disposal route - landfill, partly treated
8D.10	% Sludge disposal route - land restoration / reclamation	Percentage of (un-incinerated) sludge by disposal route - land restoration / reclamation
8D.11	% Sludge disposal route - sludge recycled to farmland	Percentage of (un-incinerated) sludge by disposal route - recycled to farmland
8D.12	% Sludge disposal route - other (specify)	Percentage of (un-incinerated) sludge by disposal route - other (specify)
8D.13	% Sludge disposal route - Total	Calculated as the sum of lines 8D.8 to 8D.12 The totals for the incumbent and 3 rd party service provider columns should sum to 100%

8.7 The quantity of sludge produced to which the percentages reported in lines 8D.1 to 8D.7 (inclusive) relate should be that reported in line 8A.3.

9. Definitions of terms; table 9A (Additional regulatory information – innovation competition)

Pro forma 9A: Innovation competition

Line	Title	Definition
9A.1	Allocated innovation competition fund price control revenue	This is the proportion of the £200m that was made available at PR19 for innovation fund activities for the period 2020-25 that the company is expected to recover from their customer base and that will be ring-fenced and administered such that it cannot be used for purposes other than the innovation fund. This should be inflated to nominal prices for the year.
9A.2	Innovation fund income from customers	Total income covered by the price control that is collected by the company from its customers in order to collectively fund the innovation competitions, that will be ring-fenced and administered such that it cannot be used for purposes other than the innovation fund.
9A.3	Income from customers to fund innovation projects the company is leading on	Total income covered by the price control that is collected by the company from its customers in order to fund the innovation competition projects the company is leading on.
9A.4	Income from customers as part of the inflation top-up mechanism	Total income covered by the price control that is collected by the company from its customers which has been allocated to the water company through the inflation top-up mechanism introduced in 2023.
9A.5	Income from other water companies to fund innovation projects the company is leading on	Total income covered by the price control that is collected by other water companies' customers and transferred in order to fund the innovation competition projects the company is leading on.
9A.6	Income from customers and transferred to other companies as part of the innovation fund	Total income covered by the price control that is collected by the company from its customers and then transferred to other lead companies in order to fund their innovation competition projects.
9A.7	Non-price control revenue (e.g. royalties)	Other revenue from appointed activities, not covered by the price control that is collected by the company that relates innovation competition activities.
9A.8	Administration charge for innovation partner	The charge made to the company for the administration cost for the innovation partner which Ofwat collects at the same time as the licence fee.

9.1 Reported revenues should not be adjusted to reflect over/under recovery.

Column	Title	Definition
1	Total amount of funding awarded to the lead company through the innovation fund	The funding awarded to the lead company for innovation project bids accepted through the innovation fund.
2	Total amount of inflation top-up funding received	The total amount awarded to the lead company under the inflation top-up mechanism covering all years of project lifecycle.

Column	Title	Definition
3	Forecast expenditure on innovation fund projects in year (excl 10% partnership contribution)	In year forecast expenditure on an innovation project funded directly through the innovation fund. Excludes business as usual expenditure on innovation activities that is already funded through totex and the 10% partnership contribution.
4	Actual expenditure on innovation fund projects in year (excl 10% partnership contribution)	In year actual expenditure on an innovation project funded directly through the innovation fund. Excludes business as usual expenditure on innovation activities that is already funded through totex and the 10% partnership contribution.
5	Difference between actual and forecast expenditure	Column 4 minus column 3.
6	Forecast project lifecycle expenditure on innovation fund projects (excl 10% partnership contribution)	Forecast total project lifecycle expenditure on an innovation project funded directly through the innovation fund. Excludes business as usual expenditure on innovation activities that is already funded through totex and the 10% partnership contribution.
7	Cumulative actual expenditure on innovation fund projects (excl 10% partnership contribution)	The sum of amounts entered in column 4 in this and previous years of AMP7.
8	Difference between cumulative actual and forecast expenditure	Column 7 minus column 6.
9	Allowed future expenditure on innovation fund projects (excl 10% partnership contribution)	Allowed remaining future expenditure on an innovation project funded directly through the innovation fund, as decided upon by Ofwat and/ or any entity involved in the decision-making process. Excludes business as usual expenditure on innovation activities that is already funded through totex and the 10% partnership contribution.
10	In year expenditure on innovation projects funded by shareholders of the lead water company	Actual in year expenditure by the lead water company water company on an innovation project (which is part of the Ofwat innovation competitions) that is not funded through the innovation competitions or through totex.
11	In year expenditure on innovation projects funded by project partner contributions	Actual in year expenditure by project partners on an innovation project (which is part of the Ofwat innovation competitions) that is not funded through the innovation competitions or through totex. This would include shareholder contributions from water company partners and any other financial contributions made by non-water company partners.
12	Cumulative expenditure on innovation projects funded by shareholders of the lead water company	The sum of amounts entered in column 10 in this and previous years of AMP7.
13	Cumulative expenditure on innovation projects funded by project partner contributions	The sum of amounts entered in column 11 in this and previous years of AMP7.

Line	Title	Definition
9A.24	Total	Sum of lines 9A.9-9A.21.

10. Definitions of terms; tables 10A-10E (Additional regulatory information – green economic recovery additional impacts reporting, performance reporting and scheme delivery)

10.1 For an overview of green economic recovery and reporting requirements, including cost reporting, see section 4S.

Pro forma 10A: Additional reporting to account for impacts of green recovery

- 10.2 The impact of delivering the green recovery schemes should be identified in this table. We have only included parameters that measure elements of in year delivery where we consider there is merit in distinguishing between green recovery and PR19 business plan delivery.
- 10.3 For the avoidance of doubt the impact of green recovery on these parameters should also be included within the existing annual performance reporting lines in pro-formas 1 to 9. For example, the impact of replacing lead supply pipes should be included in table 6C and additional wastewater network storage volume delivered for WINEP schemes should be recorded in table 7E. In addition to reporting these parameters in the existing annual performance tables, companies delivering green recovery schemes should report the green recovery element separately in table 10A. For example:

v) Example 10.A.1: Lead pipe replacement

If a company replaces 150 lead communication pipes for water quality under its PR19 programme and 200 under the green economic recovery programme:

- 350 should be included in Table 6C, line 21, 'Number of lead communication pipes replaced for water quality'; and
- 200 should be included in Table 10A under a line created for 'Number of lead communication pipes replaced for water quality'.

w) Example 10.A.2: Wastewater network storage volume

If a company installs 20,000 m3 of additional effective storage in the network through green infrastructure to reduce spill frequencies under the PR19 WINEP programme and 5,000 m3 under the green economic recovery programme:

25,000 m3 should be included in Table 7E, line 14, ' Additional effective storage in the network delivered through green infrastructure; and

- 10.4 Table 10A has been created based upon the specified deliverables in companies' green economic recovery proposals. Companies should review and add additional lines as required following this table structure and format.
- 10.5 WINEP phosphorous removal and WRMP related green recovery schemes should be reported in tables 6F and 7F and clearly identified as green recovery within the supporting narrative. There is no requirement to repeat the information included in tables 6F and 7F in table 10A.
- 10.6 We have not provided line definitions for this table because they are identical to those described in the pro-formas in sections 1 to 9 of this document.

Pro forma 10B, 10C and 10D: Additional reporting to account for impacts of green recovery on performance commitment reporting

- 10.7 For each performance commitment impacted by green recovery investment we adopt one of two approaches, ex-ante or ex-post adjustment. The individual approach for each performance commitment is defined in our <u>green economic recovery final</u> <u>decisions</u>.
- 10.8 Where we make an ex-ante adjustment to a performance commitment, companies should include the impact from delivering green recovery in annual performance reporting in table 3A or 3B and related tables as appropriate.
- 10.9 Where we are making an ex-post adjustment to a performance commitment, companies should exclude the impact from delivering green recovery from table 3A or 3B and related tables.
- 10.10 In both cases companies delivering green recovery schemes should report the green recovery impact on performance commitments separately in tables, 10B, 10C and 10D.

^{5,000} m3 should be included in Table 10A under a line created for ' Additional effective storage in the network delivered through green infrastructure '.

These tables only report the impact of green recovery schemes with companies' actual performance position being reported in table 3A or 3B and related tables. Tables 10B and 10C cover the common performance commitments and table 10D covers bespoke performance commitments. In Table 10D companies should identify the line in tables 3A-3I in which the bespoke performance commitment is reported.

- 10.11 Where tables 10B, 10C and 10D request 'Performance level actual including impacts of green recovery investment' the figures should be taken from or linked to tables 3A-3I. The repetition of this data is to provide clarity on the impact of green recovery investment.
- 10.12 We expect the companies to provide narrative commentary to explain how they have determined the impact associated with green recovery and any material deviation of the outturn green recovery impacts from forecast impacts, alongside any supporting calculations, within their annual report on green recovery.
- 10.13 We have not provided line definitions for this table because they are identical to those described in the pro-formas in section 3 of this document.
- 10.14 The list of performance commitments we expect companies to include in these tables are included in our green economic recovery final decisions.¹²

Pro forma 10E: Green recovery delivery by component

- 10.15 Table 10E captures the progress made in delivering each green recovery scheme at component level. This table is intended to provide the input to the <u>'Green Recovery cost</u> <u>allowance adjustment model'</u>.
- 10.16 An individual table has been created for each scheme funded as part of the green recovery.
- 10.17 We do not provide line definitions for this table because detail of the green recovery reporting requirements has previously been provided in <u>'Green economic recovery: Final decisions'</u>.
- 10.18 Companies should report actual figures for the current reporting year. In addition companies should provide a forecast for the remaining years in the table at initial submission of PR24 business plans. We expect companies to provide updates on actual and forecast progress as appropriate throughout the PR24 assessment process to ensure an accurate position is available for the final determinations. Further detail of

¹² Ofwat, 'Green economic recovery: Final decisions', July 2021, Appendix A2, pp. 135–137.

the reporting requirements are included in our <u>green economic recovery final</u> <u>decisions</u>.¹³

¹³ Ofwat, 'Green economic recovery: Final decisions', July 2021, pp. 21-23 & Appendix A1, pp. 92-93.

11. Definition of terms; table 11A (Additional regulatory information - Greenhouse gas emissions reporting)

Pro forma 11A: Greenhouse gas emissions reporting

Line	Title	Definition
11A.1	Burning of fossil fuels (location-based)	Scope one direct emissions from burning of fossil fuels using a location-based approach (tCO2e)
11A.2	Burning of fossil fuels (market-based)	Scope one direct emissions from burning of fossil fuels using a market-based approach (tCO2e)
11A.3	Process and fugitive emissions	Scope one process and fugitive emissions (including refrigerants) (tCO2e)
11A.4	Vehicle transport	Scope one transport emissions: company owned or leased vehicles (tCO $_2$ e)
11A.5	Emissions from land	Scope one emissions from disposal of sludge to company's land (tCO2e)
11A.6	Total scope one emissions (location-based)	Sum of lines 11A.1, 11A.3 to 11A.5 (tCO2e)
11A.7	Total scope one emissions (market-based)	Sum of lines 11A.2 to 11A.5 (tCO ₂ e)
11A.8	Scope one emissions; GHG type CO2	Scope one emissions; GHG type $CO_2(tCO_2e)$
11A.9	Scope one emissions; GHG type CH₄	Scope one emissions; GHG type CH_4 (tCO ₂ e)
11A.10	Scope one emissions; GHG type N2O	Scope one emissions; GHG type N_2O (tCO ₂ e)
11A.11	Scope one emissions; GHG other types	Scope one emissions; GHG other types (HFCs, PFCs and SF_6)
11A.12	Purchased electricity (location-based)	Scope two emissions from purchased electricity used by company using a location-based approach (tCO2e)
11A.13	Purchased electricity (market-based)	Scope two emissions from purchased electricity used by company using a market-based approach (tCO2e)
11A.14	Purchased heat	Scope two emissions from purchased heat (tCO2e)
11A.15	Electric vehicles	Scope two emissions from power for electric vehicles (tCO_2e)
11A.16	Removal of electricity to charge electric vehicles at site	Removal of electricity to charge electric vehicles at site (tCO2e)
11A.17	Total scope two emissions (location-based)	Sum of lines 11A.12 and 11A.14 to 11A.16 (tCO $_2$ e)
11A.18	Total scope two emissions (market-based)	Sum of lines 11A.13 to 11A.16 (tCO ₂ e)
11A.19	Scope two emissions; GHG type CO ₂	Scope two emissions; GHG type $CO_2(tCO_2e)$
11A.20	Scope two emissions; GHG type CH4	Scope two emissions; GHG type CH ₄ (tCO ₂ e)

Line	Title	Definition
11A.21	Scope two emissions; GHG type N ₂ O	Scope two emissions; GHG type N ₂ O (tCO ₂ e)
11A.22	Scope two emissions; GHG other types	Scope two emissions; GHG other types (HFCs, PFCs and SF_6) (tCO $_2$ e)
11A.23	Business travel	Scope three emissions from business travel on public transport and private vehicles used for company business (tCO2e)
11A.24	Outsourced activities	Scope three emissions from outsourced activities (if not included in scope 1 or 2) energy and other (if other please specify) (tCO2e)
11A.25	Purchased electricity; extraction, production, transmission and distribution (location- based)	Scope three emissions of the extraction, production and transmission and distribution of fuels consumed in the generation of electricity, using a location-based approach (tCO ₂ e)
11A.26	Purchased electricity; extraction, production, transmission and distribution (market- based)	Scope three emissions of the extraction, production and transmission and distribution of fuels consumed in the generation of electricity, using a market-based approach (tCO ₂ e)
11A.27	Purchased heat; extraction, production, transmission and distribution	Scope three emissions of the extraction, production and transmission and distribution of fuels consumed in the generation of heat (tCO2e)
11A.28	Purchased fuels; extraction, production, transmission and distribution	Scope three emissions of the extraction, production and transmission and distribution of fuels consumed (tCO_2e)
11A.29	Chemicals	Scope three emissions from the production of chemicals used (tCO2e)
11A.30	Disposal of waste	Scope three emissions from the disposal and treatment of waste, including disposal to land and with third parties (tCO2e)
11A.31	Total scope three emissions (location- based)	Sum of lines 11A.23 to 11A.25 and 11A.27 to 11A.29 (tCO $_2$ e)
11A.32	Total scope three emissions (market-based)	Sum of lines 11A.23, 11A.24 and 11.26 to 11A.29 (tCO $_2$ e)
11A.33	Scope three emissions; GHG type CO ₂	Scope three emissions; GHG type $CO_2(tCO_2e)$
11A.34	Scope three emissions; GHG type CH₄	Scope three emissions; GHG type CH4 (tCO2e)
11A.35	Scope three emissions; GHG type N ₂ O	Scope three emissions; GHG type N_2O (tCO ₂ e)
11A.36	Scope three emissions; GHG other types	Scope three emissions; GHG other types (HFCs, PFCs and ${\rm SF}_6)$
11A.37	Gross operational emissions (location- based)	Total gross operational emissions location based for scopes 1, 2 and 3, using a location-based approach
	based)	Sum of lines 11A.6, 11.17 and 11A.30 (tCO ₂ e)

Line	Title	Definition
11A.38	Gross operational emissions (market-based)	Total gross operational emissions market based for scopes 1, 2 and 3, using a market-based approach
		Sum of lines 11A.7, 11.18 and 11A.31 (tCO ₂ e)
11A.39	Exported renewables	Emissions reduction from exported production of renewables (generated onsite and exported) (tCO ₂ e)
11A.40	Exported biomethane	Emissions reduction from exported biomethane (generated onsite and exported) (tCO2e)
11A.41	Insets	Emissions reduction from use of insets (tCO ₂ e)
11A.42	Other emissions reductions	Other emissions reductions (please specify) (tCO_2e)
11A.43	Total emissions reductions	Sum of lines 11A.38 to 11A.41 (tCO2e)
11A.44	Net annual emissions (location-based)	Total net operational emissions location based for scopes 1,2 and 3, using a location-based approach
		Calculated as 11A.36 minus 11A.42
11A.45	Net annual emissions (market-based)	Total net operational emissions market based for scopes 1,2 and 3, using a market-based approach This is equal to line 11A.37
11A.46	Treated water GHG emissions	GHG emissions per Ml of treated water [net GHG emissions (location-based) in kgCO2e] / [(distribution input *number of days in the year)] (kgCO2e/Ml)
11A.47	Sewage treatment GHG emissions	GHG emissions per Ml of sewage treated [net GHG emissions (location-based) in kgCO2e] / [(volume of wastewater received at treatment site)] (kgCO2e/Ml)
11A.48	Green tariff electricity	Green tariff electricity offsets purchased (tCO2e)
11A.49	Capital projects (cradle- to-gate)	GHG emissions from the manufacture of materials and products and transport to site (tCO2e)
11A.50	Capital projects (cradle- to-build)	GHG emissions from the manufacture of materials and products, transport to site and construction (tCO2e)
11A.51	Purchased goods and services	GHG emissions from purchased goods and services (please be clear on exactly what broad categories of goods and services are included) (tCO2e)

12. Disaggregation of wholesale activities – upstream services

12.1 This section sets out our definitions of the different activities that water companies in England and Wales carry out as part of delivering their upstream services.

Water service

Water resources – Abstraction licences

Description	This service has been identified separately because of the potential for a market to emerge in the future, which would enable abstraction licences to generate a separate income stream.
Boundary points	This service includes activities related to negotiating with third parties to obtain abstraction rights and to agree charges, as well as the annual cost of the licence itself. This service should not include activities that are incurred in choosing abstraction sites, optimising abstraction or ensuring compliance with licence conditions. All such abstraction planning activities and licence administration activities should be included in the 'raw water abstraction' service. This also includes Transfer Licences where they are to support another abstraction.
Assets	N/A

Water resources – Raw water abstraction

Description	The water abstraction service includes activities related to the operation of existing water resource sites, identification of new sources, catchment management, licence management, management of schemes in accordance with acts of parliament and other legal obligations, and the abstraction infrastructure which may include pre-treatment where it is upstream of raw water transport. Pre-treatment processes can vary, from a relatively simple physical separation of the largest impurities, to more complex chemical treatments.
	In some circumstances, transport from the water abstraction site is included within the abstraction service rather than in raw water transport. Where raw water is transported between Water resources assets, the assets supporting this transport should also be included in Water resources – Raw water abstraction
	The activities relating to the inspections, operation and maintenance of assets in this price control unit are included in this service.
	Raw water abstracted is taken from the point of chargeable abstraction, and together with raw water imported less raw water exported, constitutes raw water collected (UKWIR/NRA (1995) Demand forecasting methodology - Main Report), on an annual rather than daily basis.
Boundary	Start: none
points	End: Where raw and pre-treated (non-potable) water either;

	entere treetment worke
	enters treatment works;
	enters Raw water transport;
	enters raw water storage facilities;
	is delivered to the end customer; or
	is delivered to a third party water company.
	Where pre-treatment is downstream of the pump/abstraction structure the boundary is the outlet of pre-treatment. Waterresources pre-treatment is for the purposes of enabling raw water distribution and therefore should be upstream of raw water distribution assets. Pre-treatment on a treatment works is not considered Water resources pre-treatment but is Network + - Water treatment.
Assets	Reservoirs, springs and lakes with an abstraction licence – including all associated assets e.g. dams, control rooms, valves, sluices.
	Reservoirs filled by catchment rather than abstracted water from another water body.
	Reservoirs/other storage assets without an abstraction licence where the function of the asset is to support a flow condition or abstraction at another point as part of a recognised scheme(e.g. as part of a licenced operation that covers multiple locations and sources).
	Reservoirs that do not have any of the above (own abstraction licence, natural catchment or support downstreamabstraction) but do have15 days or more usable storage.
	Pre-treatment (upstream of raw water distribution) devices including Ultra Violet Panels, pH correction, other chemical process or screening/grit separation in order to protect pumps or downstream pipework.
	Aquifer recharge assets (e.g. as part of a licenced operation that covers multiple locations and sources) which augment groundwater yields.
	Borehole abstraction assets – pumping equipment, buildings and other sundry equipment.
	River abstraction assets – pumping equipment, buildings, weirs, screens, inlets, fish passes, stilling well, other sundry equipment and other assets that support abstraction (regardless of their location in relation to the source).
	Desalination abstraction assets - pumping equipment, buildings, screens, inlets, stilling well, other sundry equipment and other assets that support abstraction (regardless of their location in relation to the source).
	Effluent reuse abstraction assets – pumping equipment, buildings, screens, inlets, stilling well, other sundry equipment and other assets that support abstraction (regardless of their location in relation to the source). For direct reuse (where water does not re-enter the environment) the control point (between wastewater treatment and water treatment) is deemed the point of raw water abstraction and the assets associated with the control (e.g. pumps, valves, flow meters, level sensors) are considered as water resources.
	Pipework between Water resources defined assets. Where an abstraction asset is the first Water resource asset but not directly at the source (e.g. riverbank), any pipework between the source and first Water resource asset should also be Water resources.
	The asset used to control the volume of abstraction e.g. pump, penstock, weir or valve.
	Abstraction meters.
	IT assets – abstraction sites control.
	Vehicles,
	Premises.
	1

Network + - Raw water transport

Description	This service includes the activities related to transporting the raw water or pre-treated water from the boundaries of the abstraction site/assets or pre-treatment assets through a transport network to a treatment works, a raw water storage facility (balancing reservoirs/tanks), or to customers that require untreated or non- potable water (including third party water companies). It can also include blending of water from different sources. Where a water abstraction site and water treatment works are co- located on the same site, then the raw water effectively 'by-passes' the raw water transport stage. The activities allocated to this service include primarily the development and maintenance of the physical raw water transport network. This includes pipelines and aqueducts.
Boundary points	Start: raw and pre-treated (non-potable) water that has been pumped or gravity fed from a raw water abstraction or raw water storage source. End: raw and pre-treated (non-potable) water where it either: enters treatment works; enters raw water transport facilities; is delivered to the end customer; or is delivered to a third party water company.
Assets	 Pipelines and aqueducts. Where a water abstraction site and water treatment works are co-located on the same site, then the raw water effectively 'by-passes' the raw water transport stage and the assets should be allocated to raw water abstraction. Booster pumps, valves, meters and other equipment within the raw water distribution network not already defined elsewhere as Raw Water Abstraction. Leakage detection equipment. IT assets – network control. Vehicles. Premises.

Network+ - Raw water storage

Description	This service includes activities related to the construction, operation and maintenance of raw water storage facilities. In general, no raw water transport costs should be allocated to this service since the cost of raw water transport should be included within the 'raw water transport' service.
	Associated activities, such as inlet flow control to prevent overfilling and outflow control (which ensures continuity of availability of supply) and planned and emergency drawdown and discharge facilities (with associated permitting) are included in this service.
	Activities related to determining losses due to leakage and to ensuring security of the site from contamination are also included.
	Reservoirs/other storage assets that are not covered by the definitions in raw water abstraction and have less than 15 days usable storage should be included as raw water storage Please see Appendix 2 for more detail.
	Where pre-treatment is downstream of raw water storage it should be included in raw water storage. (Note the location of pre-treatment determines whether it should be accounted for in raw water abstraction or raw water storage).

Boundary points	Start: raw water or pre-treated (non-potable) water entering the storage facility. End: raw water or pre-treated (non-potable) water pumped or gravity fed from the storage facility where it either enters treatment works; enters raw water transport; is delivered to the end customer; or is delivered to a third party water company.
Assets	 Storage reservoirs and other storage assets that are notcaptured by the definitions in raw water abstraction and have less than 15 days usable storage. Booster pumps, valves, meters and other equipment within the raw water storage sites. Devices including Ultra Violet Panels, pH correction, other chemical process or screening/grit separation in order to protect pumps or downstream pipework. IT assets. Vehicles. Premises.

Network+ - Water treatment

Description	Receive raw or pre-treated (non-potable) water from raw water transport network and undertake treatment processes. This may include water softening. Inputs: Raw water and pre-treated (non-potable) water from raw water transport network. Outputs: Treated water (potable and non-potable) fed into the distribution network or directly to an end user customer. Waste by- products from treatment processes into the sewerage network.
Boundary points	Start: Input of raw water and pre-treated (non-potable) water from the abstraction site, raw water storage facility or raw water transport End: Treated water (both potable and non-potable) which: enters water distribution network; enters treated water storage facilities; is delivered to the end customer (without entering the distribution network); or is delivered to a third party water company.
Assets	Treatment works including; on site pipework, Pumps which support the treatment process. IT assets – treatment works control. Vehicles. Other premises.

Network+ - Treated water distribution

Description	Treated water distribution includes activities related to distributing treated water from the treatment works to the customer including secondary disinfection and other chemical dosing. This includes all trunk and distribution network repair and maintenance activities, as well as activities associated with any new network development. Inputs: Treated (potable) water from treatment sites and third parties. Outputs: Supply of treated (potable) water to customers and new appointees.
Boundary points	Start: Treated (potable) water that has been pumped or gravity fed into the treated water distribution network. End: Supply of treated (potable) water to customer.
Assets	 Water mains and pipework up to meter point or curtilage in customer premises or new appointee boundary. Booster pumps and high lift pumps. Storage reservoirs, service reservoirs and water towers within the distribution network. Leakage detection equipment. Other ancillaries including; washouts, pressure reduction valves, air release valves, hydrants Network monitoring equipment including loggers and flow measurement equipment. IT assets – network control. Vehicles. Premises. District and customer meters. Meter chambers.

Wastewater service

Network+ (Sewage collection) - Foul

Description	This service is for the collection of foul sewage from customers' properties. This includes development, repair and maintenance of the sewage collection infrastructure. Other specific activities are the provision and maintenance of ancillaries such as overflows, screens, on-line and off-line retention tanks, rising main wells and pumps and flow measurement.
Boundary points	Start: Receipt of sewage from retail customer or new appointee. End: Sewage arriving at the inlet to sewage treatment works or discharging through CSOs in adverse weather conditions.

RAG 4.11 – Guideline for the table definitions in the annual performance report

and inspection chambers). Storm overflows and screens. Street furniture and other ancillary assets. Emergency outflows. IT assets – network control. Vehicles. Premises. Storage tanks.
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Network+ (Sewage collection) - Surface water drainage

Description	This service is for the collection of surface water from exterior areas of customers' properties. This includes development, repair and maintenance of the sewage collection infrastructure. Other specific activities are the provision and maintenance of ancillaries such as overflows, screens, on-line and off-line retention tanks, rising main wells and pumps and flow measurement.
Boundary points	Start: Receipt of surface water drainage from retail customer or new appointee. End: Sewage arriving at the inlet to sewage treatment works or discharging through CSOs in adverse weather conditions. Discharge from a SuDS system adopted by the company or a watercourse.
Assets	Sewers and pipework – from customer premises/new appointees to sewage treatment works. Pumping stations and other assets within the sewerage network (for example, manholes and inspection chambers). Storm overflows and screens. Street furniture and other ancillary assets. Emergency outflows. IT assets – network control. Vehicles. Premises.

Network+ (Sewage collection) - Highway drainage

This service includes the activities related to collection of surface water that runs off roads and pavements. The activities included in this service relate to the development, repair and maintenance of the sewage collection infrastructure. Other activities that should be considered within this service may include the provision and maintenance of ancillaries such as overflows, screens, on-line and off-line retention tanks, rising main wells and pumps and flow measurement.

Boundary points	Start: Receipt of highway drainage into sewage collection infrastructure. End: Sewage arriving at the inlet to sewage treatment works or discharging through CSOs in adverse weather conditions. Discharge from a SuDS system adopted by the company or a watercourse.
Assets	Sewers and pipework – from customer premises/new appointees to sewage treatment works. Pumping stations and other assets within the sewerage network (for example, manholes and inspection chambers). Storm overflows and screens. Street furniture and other ancillary assets. Emergency outflows. IT assets – network control. Vehicles. Premises.

Network+ - Sewage treatment & disposal

Description	Receive untreated sewage from the sewage collection system into treatment works, undertake treatment processes and discharge treated wastewater into rivers, etc and sewage sludge for transporting onwards to sludge treatment processes. Includes all direct costs associated with sewage treatment including terminal pumping costs. The activities of emptying septic tanks or very small sewage works by transporting the contents periodically to the inlet of a larger sewage treatment works are sewage treatment activities. Inputs: Untreated sewage from sewage collection network. Outputs: Treated wastewater into receiving watercourses, discharge of sewage sludge for transporting to sludge treatment processes. Excludes imported liquor treatment.
Boundary	Start: Sewage arriving at the inlet to sewage treatment works.
points	End: Consented sampling point at point of discharge of treated wastewater to receiving watercourse; point of discharge of sewage sludge from sewage treatment process or from holding tank into pumping station or pipework leading to sludge treatment processes or in to tankers for onward transport for sludge dewatering or treatment processes. Sewage treatment activities include those that thicken indigenous sludge to no more than 10% dry solids through gravity or mechanical means and may use chemicals to do so. Please see diagrams in Appendix 3 for more detail.
Assets	Sewage treatment plants – tanks, filters, strainers etc. Pumps, valves and other ancillary assets. Sludge holding tanks and associated ancillary assets. Indigenous sludge thickening plant and associated ancillary assets. IT assets – treatment works control. Vehicles. Other premises.

Network+ - Sludge liquor treatment

Description	Includes all activities in transporting and treating liquors at a sewage treatment plant that have been generated during the sludge treatment process. This includes transporting and treating liquors that have been partially treated and are returned for final treatment at a sewage treatment plant. Excludes liquor treatment which is carried out at a stand-alone liquor treatment plant (which will be included in the 'sludge treatment' upstream service).
Boundary points	Start: Pipework from sludge treatment process to sewage works. End: Discharge of treated liquor to receiving watercourse.
Assets	Liquor pipework from sludge treatment to sewage treatment site. Pumps, valves and other ancillary assets. Liquor storage tanks. Vehicles. IT assets. Premises.

Sludge transport

Description	This service includes the transport of sludge from the sewage treatment plant to the sludge treatment plant. All types of transport, and associated fuel costs, are included within this service. However, transport within the sludge treatment plant or between sludge treatment plants is not included in this service, which is instead an activity of the 'sludge treatment' service.
Boundary points	Start: point of discharge of sludge from indigenous thickening processes, indigenous sludge holding tanks or directly from sewage treatment process into pumps and pipework or tankers for transport to sludge treatment processes. End: input of sludge into sludge treatment works.
Assets	Pipework from sewage treatment site to sludge treatment site. Pumps, valves and other ancillary assets. Vehicles. IT assets. Premises.

Sludge treatment

Description	All sludge treatment activities including;
	Thickening of treated sludge,
	De-watering of thickened sludge,
	Incineration of non-treated sludge; and,
	Treatment of sludge liquors in a stand-alone liquor treatment plant.
	While different technologies exist for sludge treatment, sludge treatment is defined as a technology-neutral service for the purpose of the APR. Where income is received for energy generation then this should be shown as 'negative expenditure' in table 4E.

Boundary points	Start: storage of sewage sludge in blending or holding tanks and input into sludge treatment sites. End: Point at which the treated sludge is collected for disposal. Renewable energy generated and exported or used on site.
Assets	 Pre-treatment sludge blending tanks. Screening of sludge prior to treatment or prior to disposal Pre-treatment thickening of mixed indigenous and imported sludge Sludge treatment plants – thickeners, advanced pre-digestion process assets, digesters, centrifuges, vacuum presses, belt presses, other dewatering assets, sludge dryers, drying beds. Composting vessels and facilities. Incinerators, Stand-alone liquor treatment plants. Sludge measurement assets, Cake pads, Associated pumps, valves and other ancillary assets. Treated sludge storage facilities. Vehicles. IT assets. Premises. Gas treatment and energy generation equipment such as combined heat and power (CHP) plants. CHP electrical connection to the electricity grid. Gas connections to gas grid. Measuring equipment.

Sludge disposal

Description	The collection of treated sludge from collection point, onward transport and disposal to landfill, agricultural land, land reclamation sites and to other end users in various forms including; treated sludge incinerated sewage sludge ash (ISSA), composted sludge, sludge cake. Where income is received for treated sludge then this should be shown as 'negative expenditure'.
Boundary points	Start: Collection from treated sludge holding tanks or cake storage facilities at sludge treatment works; or collection of untreated sludge that is taken directly for disposal such as via landfill sites. End: Sludge disposed or recycled to land.
Assets	Vehicles. IT assets. Premises. Landfill sites or sludge tips. Incinerators (for completely treated sludge). Sludge measurement assets.

13. Household and Non-household premises

- 13.1 In April 2017, the business retail market was opened to competition. Around 1.2 million business customers in England became eligible to choose their water and waste water supplier. Reflecting the policy position of the Welsh Government, the new business retail market was not extended to customers of Welsh water companies. Customers of Welsh water companies continue to be only able to switch their water supplier if they are supplied with at least 50MI of water per year.
- 13.2 Our PR19 final determinations said that the control for residential retail activities relates to the supply of water and, where relevant, the provision of sewerage services to household premises (as defined in **section 17C of the Water Industry Act 1991**) ("**Residential Retail Activities**"). For Welsh water companies our PR19 final determinations also set a control for business retail activities that relates to the supply of water, the provision of sewerage services or the carrying out of trade effluent functions in relation to premises other than household premises (as defined in section 17C of the Water Industry Act 1991) ("**Business Retail Activities**").
- 13.3 For the purposes of the regulatory accounting guidelines, the definition of "households" (and any references to "household properties" or "household premises") is the same as the legal definition of "household premises" in section 17C of the Water Industry Act 1991. Non-household properties or premises are premises other than household premises (as defined in section 17C of the Water Industry Act 1991)."

Residential and Business properties

13.4 In our cost assessment tables and the PR19/PR24 business plan tables, where the definitions refer to 'residential' properties then this has the same meaning as 'households' as described above. References to 'business' properties have the same meaning as 'non-household' properties described above.

14. Infrastructure and non-infrastructure assets

14.1 Infrastructure assets generally comprise:

underground systems of mains and sewers; impounding and other types of raw water storage reservoirs; dams; sludge pipelines; sea outfalls; and information about infrastructure assets e.g. zonal investigations records.

14.2 Non-infrastructure assets cover:

intake works;
pumping stations;
treatment works;
boreholes;
operational land;
offices;
depots;
workshops;
residential properties directly connected with operational services;
land held for protecting wholesomeness of water supply;
plant and machinery;
vehicles;
surplus land; and
all other assets not listed above or as infrastructure.

15. Reporting base, developer services and enhancement expenditure

- 15.1 Broadly, **base expenditure** is required to maintain the current level of service to customers. Base expenditure will include costs relating to the day-to-day running of the business and expenditure on maintaining the long-term capability of assets, as well as expenditure to improve efficiency.
- 15.2 **Developer services** expenditure is that required by developers to provide the same current level of service to newly connected customers. It also includes expenditure to divert water and sewer mains in connection with property developments, road improvements etc.
- 15.3 **Enhancement expenditure** is generally where there is a permanent increase or step change in the current level of service to a new "base" level and/or the provision to new customers of the current service level.
- 15.4 Enhancement expenditure should be based from 1 April 2020.
- 15.5 Enhancement operating expenditure can be classified as:

expenditure incurred in the creation and running of new capital assets; and expenditure on operating solutions instead of (or alongside) capital solutions to deliver service enhancements.

- 15.6 All of these categories of expenditure should be reported within enhancement operating expenditure.
- 15.7 Companies should report expenditure in the year consistently with the final determinations.
- 15.8 Operating expenditure for enhancement projects should continue to be reported as enhancement so that the full impact of all enhancements in the AMP is visible. If a project is commissioned mid-year companies would only report part-year running costs in year one but whole-year running costs in year two. These enhancements would then be considered base in the next period.
- 15.9 Local authority and cumulo rates should not be included in enhancement expenditure but reported wholly in base expenditure.

15.10 Companies may need to proportionally allocate costs between different enhancement categories, or to distinguish the elements of a scheme that relate to enhancement from those that relate to base. The general principles for the allocation of expenditure are contained in section 2.1 of RAG2. The onus is on companies to ensure that all costs are ultimately allocated in accordance with these principles, but companies should identify appropriate cost drivers, for example:

rate of flow; equivalent population; or hydraulic capacity.

16. Major projects

16.1 We define the following areas as Major projects:

Projects listed as Direct procurement for customers (DPC) projects in <u>PR19 final</u> <u>determinations "Delivering customer value in large projects"</u> Projects listed as potentially suitable for DPC in <u>PR19 final determinations</u> <u>"Delivering customer value in large projects"</u> North East London resilience enhancement programme London water network improvement enhancement allowance Strategic water resource projects; and Havant Thicket winter storage reservoir.

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