

ANNUAL PERFORMANCE REPORT CONSULTATION 2020-21

United Utilities response to the Ofwat consultation

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

Table of Contents

Q1. Proposed changes to the APR tables in Appendix 1.....	3
Q2. Comparison of performance to the PR19 business plan tables.....	16
Q3. Transactions between the price control units (sludge liquors).....	21
Q4. Practical presentational issues.....	23
Q5. Deadline for the APR publication.....	24
Q6. ODI performance model.....	25
Q7. Performance against the PR19 asset health long list.....	26
Q8. Developer services reporting.....	29
Q9. Reconciliation in table 2K using infrastructure charges before any efficiency discounts.....	30
Q10. Assurance scope.....	31
Q11. Property and customer numbers.....	33
Q12. Total volume of network storage.....	34
Q13. Strategic water resources.....	35
Q14. Social tariffs.....	36
Q15. Direct effluent reuse.....	37
Q16. Bioresources data requirements.....	38
Q17. Innovation competition.....	41
Q18. Reporting requirements for small companies.....	43
Q19. Bilateral entry adjustment.....	44
Q20. Greenhouse gas emission reporting.....	45
Q21. Nature based solutions reporting.....	49
Q22. Household bills reporting.....	53
Additional comments re: RAGs not covered in above consultation responses.....	54
Appendix 1 – Example of the change required to all totex tables to ensure PU recharges for depreciation are presented in a transparent manner and feed into total totex.....	58
Appendix 2 – Supplementary information to Q16 response: Our proposal for Bioresources reporting requirements.....	59

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

Introduction

United Utilities welcomes the opportunity to comment on Ofwat's consultation on the Annual Performance Report 2020-21.

We have responded to each of the questions set out in the consultation and have also set out a number of additional comments about the RAGs that are not covered in the responses to the specific questions.

Consultation questions

Q1. What are your views on the proposed changes to the APR tables in Appendix 1?

We welcome a thorough review of the RAGs to ensure accurate monitoring of company performance against PR19 final determinations. However, there are some areas that require further updates to ensure full alignment with the PR19 final determination models and methodologies, regulatory mechanisms work as intended and consistency of reporting across companies. We have separated our comments into two sections; those we consider to be of most importance and other issues. These are summarised below, and the detailed responses follow thereafter.

Summary of our key proposals

Reporting of principal use (PU) recharges:

To ensure that there is no double count of PU recharges within Retail Household, enhance transparency and consistency of reporting, we propose:

- Reinstatement of Table 2A in line with the 2019/20 RAGs, where PU recharges are presented as separate, distinct, lines outside of 'Operating expenditure'.
- To ensure that PU recharges roll up into reported totex (if this is the intention), the totex tables should be amended so that they also include two additional PU recharge lines, with totals linked through to Table 2A.
- The RAG 4.09 line definitions are updated accordingly.

Financial flows:

Line 1F.2 'Actual performance adjustment 2010-15' is removed and not replaced with an equivalent '2015-20' adjustment line. This will avoid the risk of double counting rewards and penalties within financial flows.

Direct Procurement for Customers (DPC):

The primary statements are expanded to include a new separate adjustments column to separately report the DPC impacts which could then be deducted from the 'Total appointed activities' column.

RAG 1.09 should be expanded to explicitly state that DPC impacts should be excluded from all APR tables via an adjustment to the primary statements. RAG 3.12 could be amended to require companies to provide narrative in the APR explaining the adjustments for DPC (particularly if there is no separate column for DPC impacts in the primary statements).

Reporting of revenues: The RAGs should provide clarification on how companies are expected to report actual revenues across the four wholesale price controls, to ensure consistency of reporting.

Grants and Contributions: Line references need to be updated to ensure that grants and contributions are accurately reported in table 2B totex analysis and table 2M revenue reconciliation.

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

Table 2N Developer services non-financial information: This table is moved to section 4 of the APR, so it is not subject to audit opinion by a financial auditor.

Totex and Shadow RCV reporting

A number of issues need to be addressed to ensure alignment to Ofwat's PR19 cost reconciliation model and consistency of reporting between companies. Please refer to question 2 for our response on this.

Other issues:

- **Major capital projects** - a clear definition of 'major capital project' should be included in RAG 4.09. This should mirror the definition contained on page 13 of the APR consultation document.
- **Residual non-household costs** - RAGs are amended to move 'providing information and administration for new connections' activity to non-appointed.
- **List of table queries where line references need updating and/or further clarification**
- **Bioresources table queries**

Key issues:

Reporting of principal use recharges (Table 2A)

For 2015-20 APR reporting, the RAGs were clear that capex and associated depreciation were recorded in the price control unit of principal use, with depreciation recharges reported as an operating cost in the line 'Recharges from other segments' in APR pro forma 2A (with offsetting income reported on the 'Recharges to other segments' line below). Importantly, this was a separate line to 'Operating expenditure' and thus depreciation recharges were not reported within operating expenditure (or therefore totex). We followed this RAG guidance for 2015-20 APR reporting.

However, it was clear in Ofwat's PR19 guidance and query responses (PR19 Queries No's 12, 250, 549 and 576) that PU recharges should be reported in 'Operating expenditure', rolling up into totex, and therefore we completed the AMP7 totex values for our PR19 business plan submission on this basis.

For 2020/21 reporting, we can see that some changes have been made to Table 2A, however it remains unclear how PU recharges are recorded in the APR tables and therefore whether they are ultimately reported within totex. This could result in inconsistency of reporting between companies and impacts to the totex sharing mechanism if not clarified.

The RAG 4.09 definition for Table 2A now states "*It is assumed in this table that principal user recharges are included in the costs disclosed for each price control*". However, the definition does not make it clear which cost line the recharges should be reported and there are a couple of sensible options:



- Depreciation (Line 2A.4), which would be the obvious line since this is where the original depreciation charge is also recorded. However, this would result in PU recharges being reported outside of totex.
- Operating expenditure (Line 2A.3), which would be in line with Ofwat's PR19 guidance, and ensures that the recharges flow through to totex.

In either case, i.e. whether PU recharges are reported in line 2A.3 or 2A.4, the actual principal use recharges would no longer be visible as they would be subsumed into either cost line. This would reduce transparency compared to 2015-20 reporting and could lead to inconsistency of reporting since it would not be clear whether companies have included PU recharges or not.

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

Table 2A also includes separate lines to report PU recharges to and from Retail household only (lines 2A.7-2A.10). If recharges between the wholesale price controls and Retail household are reported in these lines as well as line 2A.3 or 2A.4, this would result in a double count of recharges within operating profit. This issue can be illustrated by this simple example below, which assumes a £4m recharge from Wastewater Network Plus to Retail household and the recharge is recorded within depreciation.

Extract of Table 2A (£m)	Retail (HH)	Wastewater Network Plus	All other price controls	
All other table lines	0	0	0	
Operating expenditure (2A.3)	0	0	0	 In totex
Depreciation - tangible fixed assets (2A.4)	(4)	4	0	 Not in totex
Recharge from wholesale for assets principally used by wholesale (2A.7 & 2A.9)	(4)	<i>N/A – not required to be reported as per the RAGS</i>		
Income from wholesale for assets principally used by retail (2A.8 & 2A.10)	0			
Operating profit (2A.11)	(8)	4	0	Double count of retail recharge

Proposal:

To remove this double count error, enhance transparency and to ensure consistency of reporting, we believe it would be preferable to report all PU recharges on separate lines outside of 'Operating expenditure' in all relevant APR tables.

We propose:

- Reinstate Table 2A in line with the 2019/20 RAGs, which has separate, distinct, lines to report PU recharges, in its own section entitled 'Recharges in respect of 'principal use' assets, which sits outside of 'Operating expenditure' for all price controls. The RAG 4.09 line definitions should also be amended accordingly i.e. remove the guidance that states "It is assumed in this table that principal user recharges are included in the costs disclosed for each price control".
- To ensure that PU recharges roll up into reported totex, the totex tables (i.e. 2B, 4D, 4E, 4J, 4K) should be amended so that they also include two additional principal use recharge lines, with totals linked through to Table 2A. This could be presented in a new section e.g. 'Principal use recharges' which then feeds into total totex (i.e. similar to how pension deficit recovery payments are presented). The proposed updated table 2B is presented in appendix 1. The RAG 4.09 line definitions will also need to be amended accordingly to include PU recharges within totex.

Financial Flows (Table 1F)

We are pleased that the cost of debt line definition has been amended to be presented pre-tax which removes the double count of taxation within financing performance.

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

Line 1F.2 Actual performance adjustment 2010-15

It is also important that the 'Actual performance adjustment 2010-15' Line 1F.2 is removed and, for 2020/21 reporting, is not replaced with an equivalent '2015-20' adjustment line.

The inclusion of this within financial flows is inconsistent with the rest of this metric, which calculates returns generated/earned in the year and does not include returns when they are subsequently actually realised through the P&L (e.g. through revenue/RCV adjustments). This is demonstrated by Line 1F.13 re: ODIs which only includes out/under performance from ODIs as a result of current year performance (i.e. when earned) and does not adjust for when the subsequent payment is made/received through revenues/RCV (i.e. when actually received). This same basis also applies for Line 1F.12 totex and Line 1F.16 retail.

In addition, for AMP7 reporting there is now an additional risk of double counting rewards and penalties within financial flows – once in the year of performance when then the reward/penalty arises, and then again (two years later) when the reward/penalty applies to revenues. For example, if the measure includes ODI rewards/penalties accrued in FY19 and FY20 but which are applied to AMP7 revenues, these have already been reported within financial flows in FY19 and FY20 and thus would be reported twice. For AMP6 reporting this was less of an issue since the 2010-15 (AMP5) adjustments would never previously have been captured in financial flows, since financial flows was only introduced in AMP6.

Financial flows should represent actual returns generated in the year and the current combination of approaches distorts this measure, becoming misaligned to actual returns generated in the year. **As such, we believe line 1F.2 'Actual performance adjustment 2010-15' Line 1F.2 should be removed and not replaced with an equivalent '2015-20' adjustment line.**

Additional minor points re. financial flows:

It would be helpful for Ofwat to clarify the audit requirements for this table to ensure a level playing field across the sector. This table does contain non-financial measures such as ODIs which may reasonably be out of scope for audit. Whilst all lines of our Table 1F was subject to independent audit opinion for 2019/20 reporting, in line with the 2019/20 RAGs, we understand that this was not the case for all companies, and as such, it would be helpful for Ofwat to confirm their expectations on this so as to 1) ensure that all companies are held to the same standards of accountability, 2) uphold reporting guidance and avoid it falling into disrepute and 3) ensure that all companies are clearly aware of – and can contract for – third party assurance requirements.

In addition, there is a line reference which needs to be updated to reflect the new table layout as detailed below:

Line	Issue
1F.9 Cost of debt	Definition is " <i>The Cost of Debt (unadjusted for Hedging Instruments less Line 1F.11</i> ". Line 1F.11 should be changed to Line 1F.10, reflecting the Hedging Instruments line.

Direct Procurement for Customers

We are pleased that our proposals have been considered, and we agree with Ofwat's proposal that DPC impacts arising from i) leased assets, under IFRS16, procured through a DPC process (including associated lease liabilities); and ii) revenue collected on behalf of and payments to a competitively appointed

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

provider - should be excluded from the regulatory accounts. This will help ensure regulatory mechanisms work as intended and are aligned with PR19.

We agree with Ofwat's statement in the RAG consultation document.

"Companies will make adjustments for these assets in table 1A in the APR so visibility of the amounts will be maintained. We would expect any companies to provide a clear breakdown of the differences for such DPC projects."

To ensure adjustments are made on a consistent basis and are transparent, the primary statements (i.e. Tables 1A-1D) could be expanded to include a new separate adjustments column (next to the statutory to regulatory adjustments column) called 'Direct Procurement for Customers' to separately report the DPC impacts which could then be deducted from the 'Total appointed activities' column. This would ensure all intended DPC impacts are excluded from the reported regulatory numbers in the section 2-4 APR tables.

In addition, we believe it would be beneficial to expand RAG 1.09 section 4.8 to be more explicit in stating how companies should exclude the DPC impacts i.e. excluded from all APR tables via an adjustment to the primary statements. RAG 3.12 could also be amended to require companies to include a brief narrative in the APR explaining the adjustments for DPC (particularly if there is no separate column for DPC impacts in Tables 1A-1D).

Reporting of revenues

As expected, companies are now required to report actual revenues against the four wholesale price controls.

It would be helpful if Ofwat would clarify its expectations on how it expects companies to split revenues. For example, this could be done:

- by allocating simply based on PR19 allowances (very quick and easy to do); or
- based on a separation of charges between price controls which may be expected to reflect the separate build-up of charges (i.e. recognising the cost of providing the separate services and the consumption of those services by customers), particularly with the evolution of competition in Bioresources. This would require changes to the charges guidance, as Ofwat does not currently require companies to establish separate charging arrangements for the four wholesale price controls.

We do not have a strong preference about which approach should be taken, but we do believe that clarity is important to ensure consistency of reporting across companies. Current ambiguity could also lead to unnecessary time spent setting and monitoring charges to report the resultant revenue allocations down to a more granular price control level.

Companies should also be required to include narrative commentary explaining how they have allocated revenues between the four price controls.

Grants and Contributions

It is important that the line definitions are updated to ensure that grants and contributions are accurately reported in table 2B totex analysis and table 2M revenue reconciliation. Please see question 2 for our response on this.

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

Table 2N Developer services non-financial information

We welcome the move for more granular reporting. However, it is critical that Table 2N is moved to section 4 of the APR, as this table reports non-financial data and therefore should not be subject to audit opinion by a financial auditor. We would expect section 2 to include financial information only as in previous years. In addition, to ensure that information provided is consistent we believe that companies would benefit from additional clarity being added to the line definitions provided in RAG 4.09, as detailed in our response in question 8.

Totex and Shadow RCV reporting

We welcome the expansion of Table 4C which better presents the build-up of totex performance, split by customer sharing mechanism grouping, and how this feeds into the Shadow RCV. However, to ensure alignment to Ofwat's PR19 cost reconciliation model and consistency of reporting between companies, there are a number of issues that we believe needs to be addressed. Please see question 2 for our response on this.

Other issues:

Major capital projects

We welcome the introduction of Tables 4F and 4G to monitor the costs for major projects. To ensure companies report on a consistent basis, a clear definition of 'major capital project' should be included in RAG 4.09, mirroring the definition contained on page 13 of the APR consultation document (i.e. Projects listed as DPC projects in PR19 FD, Strategic water resource projects etc.). In addition, it would be helpful to clarify how expenditure by purpose should be categorised (e.g. each project split out by driver aligned to Table 4L/4M categorisation). Finally, further clarity could be included on what is meant by "*directly attributable costs only*". We would take this to mean costs incurred by UUW ourselves (and for example on DPC projects not including spend incurred by the CAP) rather than meaning to exclude indirect costs we incur e.g. G&S overhead allocations.

Residual non-household costs

The consultation states that where "*developers have chosen to deal directly with the wholesaler the costs of dealing with such direct contact is therefore a wholesale cost*". This would result in the costs for providing 'developer information and administration for new connections' and the associated application fee income being reported within wholesale.

However, to ensure alignment with PR19 FD models which did not allow for such costs/revenues in the wholesale price control and to ensure these reported costs/revenues do not inappropriately feed into the totex sharing/wholesale revenue control mechanisms, we propose that the RAGs are amended to move this activity to non-appointed.

This could be done by amending the RAGs as follows:

- remove 'providing information and administration for new connections' from retail activities within RAG2.08 table 2.4.1;

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

- update the wording in RAG 2.08 section 2.9 'Allocation of operating costs and capital costs for Developer services' to reflect the reclassification to a non-appointed activity; and
- add 'providing information and administration for new connections' as a non-appointed activity within RAG4.09 Appendix 1."

Other areas where changes to table/line definitions are required:

Table	Line	Issue
2A/2D/5A /6A/6B	All	<p>The guidance concerning allocation of borehole pumping stations in RAG2.08 (and 2.07) is open to interpretation. In the example provided 'all costs (Opex & Capex) and assets' are required to be allocated across price controls. However, in our current reporting, in table 4P (5A in 2020/21), we assign boreholes and capacity to the most upstream price control in accordance with the Ofwat guidance received by UU on 23/10/18 PR19 query UUW-IAP-CA-014. Whereas, in table 2D/2A, we assign all assets (and associated capex), including borehole pumping stations, using the principal use approach with recharges of depreciation made to other price controls as appropriate. Average pumping head (Table 5A/Table 6A/Table 6B in 2020/21) and opex is proportionally allocated to Price Controls. In order to provide clarity, it would be helpful if:</p> <ul style="list-style-type: none"> • Section 2.11 of RAG2.08 made it clear that capital costs should continue to be allocated on a principal use basis and Table 4P should continue to be prepared on the most upstream service basis; and • the example on RAG2.08 page 35 made reference to how the pumping station is allocated based on the most upstream service and the capex is allocated on a principal use basis
2C	2C.9-2C.11	<p>The line definitions for lines 9-11 includes the sentence "<i>Depreciation <u>includes</u> amortisation of deferred credits and fixed intangible assets.</i>" We are assuming that this should be "<u>excludes</u>" rather than "<i>Includes</i>", as amortisation of deferred credits is included in other income (Table 1A Line 5) and amortisation of intangible assets is included on line 12.</p>
3A	All	<p>We recommend that table 3A is replaced by the 'ODI performance model' table that Ofwat describes in question 6 of the consultation. This will avoid the need for duplication of data.</p>
3A	All	<p>We recommend the removal of the reporting requirement for end of AMP performance and ODI financial position columns in years 1 and 2 of the AMP. Early in the AMP the uncertainty level with regard to the end of year 5 position will be very high, leading to the reporting of numbers that are likely to turn out to be incorrect. This could cause issues if put into the public domain in terms of profit and loss warnings. Potential for it to be replaced by a financial range estimate, but United Utilities believe it should be initially removed as a requirement.</p>
3A	3A.1	<p>The DWI confirms the final CRI score mid-July when the Chief Inspector's Report is published. In previous years United Utilities has reported the provisional score provided by the DWI. Historically the provisional and confirmed number have been different.</p>

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

		The CRI number appears in table 3A, 3B and 6C. Therefore, the requirement to report in 6C should be removed, in order to avoid duplication.
3B	3B.8 and 3B.9	Further guidance on the definition for proactive and reactive mains repairs would improve the comparability of data. The targeted review of common performance commitments by Jacobs and KPMG stated that “Jobs reported by customers and third parties are generally classified as reactive / reported, while jobs reported by operational teams (as a result of leakage detection activity) are generally classified as proactive / detected. Companies expressed differing opinions on how leaks identified with telemetry should be classified”.
3B	3B.21 onwards	In section I of the table (other performance commitments), there is a requirement to insert a dataset to standardise (normalise) the bespoke PC output. For a large number of our bespoke PC’s this is not appropriate (e.g. natural capital, systems thinking). Therefore suggest this section should only be applied to the asset health metrics detailed in table 3E as they can be standardised and common methodologies would be applied in shadow reporting.
3E	3E.2 and 3E.5	Further guidance on the definition of planned and unplanned maintenance metrics is required if the information is to be comparable across the industry. However, as per our response to the question 7 of the APR consultation, we disagree with the adoption of both unplanned maintenance measures.
3E	3E.3	For External sewer flooding, United Utilities would like to see the numbers of flooding incidents ‘customer proactively reported’ and the numbers of ‘company reactively identified (i.e. neighbouring properties)’ adding into this table. This would mirror the approach taken for internal flooding that already exists in table 3B.
3E	All	If shadow reporting of these five measures is enforced, then should go into the section at the bottom of table 3B rather than being its own table (see comment above).
4B	4B.823-4B.824	In the RAGs this is stated as 3% and 2% for RPI and CPI respectively - however, this will always be different to out-turn RPI/CPI and is inconsistent with how the nominal interest rates in table 1E are calculated for index-linked debt (which uses the annualised interest rate at 31 March 2021). We would recommend the definition is changed to be that “ <i>the RPI and CPI assumptions are equal to the annualised March monthly figure reported by ONS</i> ”.
4H	Multiple lines	There are line references which needs to be updated to reflect the new layout of tables 4H and 1F, for example: <ul style="list-style-type: none"> • 4H.2/4H.3 should reference line 4C.22. • 4H.5 (RORE) – Totex out / (under) performance should refer to line 1F.12, ODI out/under performance should refer to lines 1F.13 to 1F.15, retail out / underperformance should refer to line 1F.16, and Other factors should refer to line 1F.16. • 4H.19 (RCF) should reference line 4H.14. • 4H.20 (RCF / capex) should reference line 4H.19 • 4H.29 (Regulatory return for the year) should be the sum of 4H.23 to 4H.28

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

4M	4M.4, 4M.5, 4M.10, 4M.11	Growth expenditure includes lines for 'Growth at sewage treatment works (excluding sludge treatment)' and 'Reduce flooding risk for properties'. These costs are not recovered from developers, and thus total growth expenditure will not reconcile to Grants and Contributions reported in Table 4E. If the intention is that growth expenditure should reconcile to Grants and Contributions reported in 4E, then we suggest that these two line are moved to another separate distinct section.
4L 4M	4L.45-4L.76 4M.44- 4M.74	Our interpretation of this proposed table is that operating cost expenditure on enhancement is only that incurred within the year and not cumulative over the AMP, however in the equivalent table WS2/WWS2 tables at PR19 cumulative costs were also captured for operating cost impacts. We believe the same cumulative cost capture should also apply to all schemes completed within the AMP from a set basepoint; as an example this is because a scheme completed on 30 th September within a year may only drive a part year of enhancement costs within that financial year but would then continue to create a full year impact thereafter.
6C	6C.1 and 6C.2	Properties billed for measured water inform estimates of the costs of maintaining meters. On the assumption that companies do not need to maintain (or replace) meters the guidance says to exclude void properties. Meters associated with void properties are maintained as they often become occupied again therefore voids should be included.
6C	6C.23	The DWI developed the CRI measure to replace mean zonal compliance. MZC should be removed from table 6C.
6D	All	Our networks are dynamic systems and multiple leakage activities are often carried out in district metered areas therefore leakage savings calculated will be based on a number of assumptions. These assumptions may differ company to company meaning data is not comparable.
7D	All	It would help to have the EA driver associated with each of the lines to make sure all of the relevant information is included.

Bioresources table queries:

In our response to question 16 we have suggested an alternative set of tables which we believe will provide comprehensive data about Bioresources activities, that will allow effective comparisons of performance to be derived. However, should these tables not be developed further we have provided the following comments below with regards to the existing set of tables.

Table	Line	Issue
Table 8A	8A.1 & 8A.2 8A.6 & 8A.7	We recognise the need to report sludge treated / disposed by incumbent and 3 rd party service provider. We recommend that Ofwat consider whether there is benefit in also revealing work done through contractors. These businesses play a vital role in the provision of services delivering solutions at multiple stages in efficient and innovative ways and does not require the full service to be undertaken by a single party. Examples of contracted activity exist in sludge transport, sludge treatment and sludge disposal, but this is not recognised in the current reporting approach. We think revealing the extent of the value conducted by contracted work in

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

		each upstream service accounting area could reveal more information about the Bioresources market.
Table 8A	8A.5	We disagree with the proposed line definition. Firstly, because this is inconsistent with the Bioresources boundary. The proposed definition includes dewatering (>10%ds) but not thickening hubs (<10%ds) where sludge imports are received and therefore doesn't capture the entirety of the Bioresources price control. Secondly, the definition of co-location includes sites transported by pipeline, which may be a significant distance from another Wastewater Treatment works: We do not consider this to be co-located and should be reported as sludge transport. Using these definitions may not reveal the correct scope (and costs and work done) making comparisons ineffective. If by co-location, Ofwat intends to identify sludges which have no intersiting transport costs we propose the definition, "sludge produced which requires no sludge transport by road or pipeline prior to sludge treatment."
Table 8A	8A.9-8A.13 8A.15 & 8A.16 8A.18	We are unable to provide the information requested. Provision within the line definitions for use of estimated data has been removed and this creates a problem for us. We do not currently have the capability to report actual distance travelled. We report the most effective route for each journey and therefore use an estimated distance. This will be very similar to the actual measured distance (the variance caused by occasional traffic diversions). We are transitioning towards measured data but require the use of estimated distance to be retained for reporting during AMP7.
Table 8A	8A.9-8A.12	The proposed lines reveal work done; however, they are not aligned to upstream services. This fails to reveal and manage the potential fluidity of the boundary between Wastewater Network Plus and Bioresources caused by operational logistical decisions. As a result the lines fail to establish consistent and comparable information about intersiting activity.
Table 8A	8A.9-8A.12	This section does not require the activity to be reported by 'work done by incumbents' and 'work done by 3rd party sludge service provider'. We think Ofwat should consider whether it should, in order to be consistent with sludge treatment and disposal lines. Further consider whether contractor costs should be revealed.
Table 8A	8A.14	We do not think that this line will be used: To fit with the upstream service boundary description and boundary points it requires a pipeline direct to a landfill, restoration or agricultural location. Ofwat should consider the usefulness of this reporting line.
Table 8B Operating cost analysis for Bioresources	8B.14-8B.26	There is a large % of costs which sit within the 'Other' column, for example in our 2019/20 APR table 4W (equivalent of new Table 8B) 37% of sludge treatment opex was reporting in 'Other'. To provide improved disclosure we would recommend further splitting this out between 'Thickening', 'Dewatering' and 'Other'. A greater level of granularity in sludge thickening and dewatering cost reporting will further ensure consistency in reporting at the boundary and reveal the work done in thickening sludge in Wastewater Network Plus as well as the Bioresources price control.

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

8B Operating cost analysis - Bioresources	8B.14-8B.39	'Incineration of digested Sludge' is shown in table 8B as being a sludge treatment activity. This appears to be inconsistent with RAG 4.09 which requires 'Incineration of non-treated sludge' (page 136) to be classified as Sludge Treatment and 'Incinerators (for completely treated sludge)' (page 138) to be classified as Sludge Disposal. Table 8B should be amended to include 'Incineration of digested sludge' in the Sludge Disposal block rather than Sludge Treatment. For further clarity, the guidance for Sludge Disposal on page 137 of RAG4.09 should retain the sentence 'If incineration of completely treated sludge takes place, then this should be included in 'sludge disposal' as was previously included in RAG4.08 (page 120).
Table 8C /Additional Bioresources table 1	8C.1-8C.4	We are unable to provide measured data in MWh and data will have to be calculated. Flows of energy between Bioresources and Wastewater Network Plus are calculated based on netting off energy used or offset. We are rolling out some data measurement but full measurement will require significant investment.
Table 8C /Additional Bioresources table 1	8C.1	The proposed information is entirely within Bioresources price control. It is unclear why data is needed or what it will demonstrate in relation to a market. It is inappropriate to assign a financial value as this energy as it is contained within the price control. This is especially true for heat, which is a by-product of the process, rather than being specifically generated for revenue purposes.
Additional Bioresources table 1	n/a (Energy generated by Bioresources that is unused)	The purpose of reporting unused energy generated is unclear and we ask Ofwat to consider the usefulness of this reporting line. For electricity we will either use or export any excess to grid, so this would always be zero. For heat, there is potential to produce more heat than is needed and this would be 'unused' but this is unmeasured. Unused energy is a lost opportunity to generate revenue; however, it has no value in itself and only a subjective financial value can be assigned: If there is no market or use for this heat, it therefore has no financial value.
Additional Bioresources table 1	8C.1-8C.4	We believe that the calculated 'Total' columns will provide little meaningful information. Much of the biogas generated will be used to generate heat or electricity through CHP. The total of the biogas, heat and electricity generated will 'double count' energy production and value. If a total calculation is required we would like to propose that it would be more meaningful to sum the Electricity (MWh), Heat (MWh) and Biogas (MWh) columns in the table.
Additional Bioresources table 2	n/a (Income from renewable energy subsidies)	We agree this it is important to report the income any renewable energy subsidies as this may reveal any distortions in the market as a result of the incentives available. Definitions should be clear in Additional Bioresources table 2 that revenue should exclude renewable energy subsidies to avoid double counting with the information provided within this table.
Additional Bioresources table 2	n/a (Income from renewable	It would help to have space provided within the table to identify and record which renewable energy subsidy the 'other' rows refer to, for additional clarity on market activity.

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

	energy subsidies)	
Additional Bioresources table 2	n/a (Income from renewable energy subsidies)	The purpose of the 'Year of expiry' data is unclear. Whilst renewable energy incentives do have a finite contract we wouldn't be able to report this as set out, as it is specific to an installation, and therefore there will be various years of expiry against each subsidy type.
Table 8C /Additional Bioresources table 3	8C.5-8C.8	We are unable to provide measured liquor return data. Measurement is difficult with inline instruments other than for flow and there would be a cost to collect the data. We would need to be able to justify the cost of additional data. We therefore recommend that standard industry engineering calculations are agreed, which can be applied to estimate the liquor loads generated from both raw sludge thickening and dewatering activities and digested sludge liquors. This would be at minimal (but not zero) cost.
Table 8C /Additional Bioresources table 3	8C.5-8C.8	The proposed lines are not aligned to upstream services. This will have a distorting effect on the Bioresources market, as companies will have varying proportions of work done in the Wastewater Network Plus and the Bioresources price controls. Without this information the market may be distorted as work done inside Wastewater Network Plus is 'hidden'.
Table 8C /Additional Bioresources table 3	8C.6	Our Mogden charges do not identify BOD as a separate component, similar to many other companies, and therefore we would question the requirement to report this. If the intention is that liquor recharges should be based on the "Mogden formula", they should be based on the individual company's published tariffs in line with how Trade Effluent customers are charged. UU propose that reporting settled COD, rather than BOD, is a better indicator of liquor treatability and basis for Mogden charges.
Table 8C /Additional Bioresources table 3	8C.7	Our Mogden charges do not identify Ammonia as a separate component, similar to many other companies, and therefore we would question the requirement to report this. If the intention is that liquor recharges should be based on the "Mogden formula", they should be based on the individual company's published tariffs in line with how Trade Effluent customers are charged.
Table 8C /Additional Bioresources table 3	8C.8	Definitions need to be unambiguous and consistently applied by all companies. Without this clarity and consistency, there risks a plethora of approaches (or different interpretations of reporting guidance), resulting in a lack of comparability across companies, which may create distortions in the Bioresources market.
Table 8D	8D.10	We agree with the need to report data by proportion to each disposal route. We would like to propose that sludge disposal to land restoration/reclamation is separated for raw and partly treated sludges. This will reflect the different permitting requirements for raw and partly treated sludge and have the additional benefit of being consistent with data reporting in 8D.8 and 8D.9.

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

Additional Bioresources table 4	n/a	The proposed lines do not provide a sufficient level of granularity on transport activities in order to understand the amount of work done, and particularly how this is split between Wastewater Network Plus and Bioresource accounting blocks. Without this information the market may be distorted as work done inside Wastewater Network Plus is 'hidden'. We propose that the definition of intersiting is aligned to the accounting boundary.
Additional Bioresources table 4	n/a (lines 1 to 4 total distance travelled)	The proposals only look to measure distance travelled per year. This does not account for thickening / dewatering of sludges and consequently the amount of water being transported. Distance doesn't necessarily equate to time or efficiency and moreover distance should be normalised for the size of company. We believe that the Work Done calculation (ttds*km/year) in Table 8A provides a better measure to understand market activity.
Additional Bioresources table 4	n/a (lines 1 to 4 total distance travelled)	UU agree with this proposal that it is unnecessary to split transport activity by transport type (pipeline, tanker, truck) as in Table 8A. As noted in table 8A UU use estimated distance data and this provision should be allowed for in any definitions.
Additional Bioresources table 4	n/a (lines 5 to 8 total trip data)	The proposals only look to measure number of trips per year. This does not account for thickening / dewatering of sludges and consequently the amount of water being transported and provides no information about relative efficiency. We believe that the Work Done calculation (ttds*km/year) in Table 8A provides a better measure to understand market activity.

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

Q2. Do you think that the tables allow a comparison of performance to the PR19 business plan tables? Are there areas where this could be improved? Are there areas where we should consider deviating from the business plan formats?

Impact of price control performance to date on RCV – Table 4C

To ensure alignment to Ofwat’s PR19 cost reconciliation model and consistency of reporting between companies it is important that the below key points in Table 4C are addressed:

- 1) The allowed totex (i.e. line 4C.1) needs to be adjusted to reflect any changes to company totex baselines which will include the output of the WINEP adjustment mechanism (i.e. once final scope of programmes is confirmed). This will ensure the reported totex subject to cost sharing variance will be comparing the adjusted FD allowance to actual costs on a like-for-like basis, in line with the PR19 cost reconciliation model. To address this we would recommend adding two additional lines to Table 4C. A new line 4C.2 to show any adjustments to totex baseline and a new line 4C.3 showing the adjusted baseline position (i.e. Lines 4C.1 + 4C.2) to enable the reconciliation of actual totex against the adjusted baseline. The new line 4C.2 would also need to be separately added/deducted to the Shadow RCV to account for the underlying adjustment that will be made as part of PR24.
- 2) A clear definition of what totex is subject to customer sharing should be included within the table line definitions, consistent to what is within the PR19 reconciliation rulebook requirements. Under the current RAG line definitions, not all item types excluded from the totex sharing mechanism are listed, including the income offset grants & contributions. In addition, further details for each line are included in the below table.
- 3) The reported ‘Customer share of totex overspend’ line 4C.7 needs to include both totex over/underspend due to efficiencies (as per current definition) as well as totex over/underspend due to timing of expenditure (not included in current line definition). Reported shadow RCV should reflect accelerated/deferred spend in any given year in line with the PR19 cost reconciliation model which takes account of the timing of totex.
- 4) The Shadow RCV build-up in Table 4C will need to reflect how sharing for the Strategic water resources schemes will work in practice. Table 4C is assuming that spend on these schemes is all not subject to customer sharing which we do not believe to be the case. Prior to gate 2 all underspends are returned to customers and any schemes that do not progress beyond gate two also return the expenditure from later phases. Similarly post gate 2, strategic resources schemes are subject to customer sharing but current line definitions would not make any adjustment to the RCV. In line with our PR19 reconciliation Rulebook consultation response, we do not believe it is appropriate to make a required adjustment to company revenues, and instead, all adjustments should be made to the RCV, in line with approach Ofwat has proposed for the WINEP adjustment mechanism.
- 5) The calculation for the “RCV element of totex over/underspend” (line 4C.20) should be derived from the customer share of totex overspend and not company share and based on (1-PAYG) rather than PAYG as currently drafted.

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

We have included comments specifically for each line of Table 4C in the below table.

Line number	Line	Issue
4C.1	Final determination allowed totex (net of business rates, abstraction licence fees and grants and contributions)	<p>As flagged in point 1) above this line does not adjust for changes to company's totex baselines resulting from the output of the WINEP adjustment mechanism. In addition, any other adjustments to FD totex (e.g. via IDoK) would also need to be accounted for. We recommend adding two additional lines to this table. The first line would report any adjustments to totex baseline (including under the WINEP adjustment mechanism) and the second line would show the adjusted baseline position, which would then be compared actual totex to derive the variances in existing lines 4C.3-4C.5. This first line showing the totex baseline adjustments would also need to be separately added/deducted to the Shadow RCV (existing line 4C.23) to account for the underlying adjustment that will be made as part of PR24.</p> <p>The line definition for actual totex also needs to be fully aligned to the FD definition of totex subject to cost sharing i.e. including price control grants & contributions but excluding the income offset e.g. by adding in the underlined section to the existing definition: <i>'The company's allowed totex in the final determination, net of allowed totex for business rates, Environment Agency abstraction licence fees, <u>non-price control (expenditure and grants and contributions) and income offset grants and contributions.....'</u></i></p> <p>This should equate to the approach taken to derive the values within table 3.7 of the FD documentation and be consistent with the definition in line 4C.2.</p>
4C.2	Actual totex (net of business rates, abstraction licence fees and grants and contributions)	<p>The line definition for actual totex needs to be aligned to the FD definition of totex subject to cost sharing i.e. including price control grants & contributions but excluding the income offset and excluded costs. Table references to 4J/4K (which exclude atypical costs) should also be changed to 4D/4E (which include atypical costs) since reported totex should include atypical costs. The existing line definition could be refined as per below: <i>'The company's actual totex <u>aligned to the final determination definition of totex subject to cost sharing. This should be presented net of business rates and Environment Agency abstraction licence fees, non-price control (expenditure and grants and contributions) and the income offset grants and contributions, and excluded costs</u> other items not subject to cost sharing, as reported in:</i></p> <p><i>Gross totex – sum of lines 4J/4K4D/E.11 and 4J/4K4D/E.19</i> <i>Business rates – line 4J/4K4D/E.10</i> <i>Abstraction charges – line 4J/4K4D.3</i> <i>Other items not subject to cost sharing –</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> <i>non-s185 diversions - line 4P.3</i> <input type="checkbox"/> <i>innovation fund – line 9A.12</i>

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

		□ <i>strategic water resource development schemes – lines 4L.22 and 4L.53'</i>
4C.7	Customer share of totex over/underspend	As flagged in point 3) above, this line should be calculated on the total value of the variance (4C.3) and not only on the efficiency element. 'Sum of 4C.5 4C.3 multiplied by 4C.6'
4C.10	Actual totex - business rates and abstraction licence fees	Change references from 4J/4K to 4D/4E respectively.
4C.15	Final determination allowed totex - not subject to cost sharing	<p>This line definition needs to also include the income offset and non-price control expenditure and grants & contributions as per the FD definition of cost sharing used to develop table 3.7.</p> <p>Also, as flagged in point 4) above, this line needs to reflect the different sharing arrangements under the strategic water resources schemes depending on the phase of each scheme. Prior to gate 2 all underspends are returned to customers and any schemes that do not progress beyond gate two also return the expenditure from later phases. Similarly post gate 2, strategic resources schemes are subject to customer sharing but current line definitions would not make any adjustment to the RCV. In line with our PR19 reconciliation Rulebook consultation response, we do not believe it is appropriate to make a required adjustment to company revenues, and instead, all adjustments should be made to the RCV, in line with approach Ofwat has proposed for the WINEP adjustment mechanism.</p>
4C.16	Actual totex - not subject to cost sharing	<p>This line definition should be updated to align to the FD definition of items not subject cost sharing.</p> <p>All spend in relation to the innovation fund should be excluded, since there was no FD expenditure allowance for this. All excluded/disallowable costs as well as the income offset and all non-price control grants and contributions should be included. The reference to other cash items line should also be changed from '4J/K.25' to '4D/K.25'. Finally, as flagged in line 4C.15 above, the lines definition needs to reflect the different sharing arrangements under the strategic water resource schemes.</p>
4C.20	RCV element of totex over/underspend	<p>As flagged in point 5) above, this formula should be "(1-PAYG) * customer share", not "PAYG * company share" which generates a different number. To address this we would recommend including an additional line (e.g. between 4C.17 & 4C.18) reporting the 'Total customer share of totex outperformance' which would be sum of existing lines 4C.7 and 4C.13. This could then be multiplied by "(1-4C.19)" to derive the correct RCV element of totex over/underspend total.</p> <p>In addition, throughout this table care should be taken with signage as the way it is currently drafted an overspend will show as a negative</p>

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

		which would reduce RCV, which is clearly the wrong way round. This could be addressed by inverting the signage in this line (or alternatively inverting the signage in the feeds to this line i.e. Lines 4C.7 and 4C.13).
New line	Net proceeds from Land Sales	For completeness and consistency to the FD, Shadow RCV should also include an additional line (e.g. between Line 4C.21 and 4C.22) which reports 50% of 'Land sales – proceeds from disposals of protected land' (as reported in table 2L.1). This total would then feed into Shadow RCV under existing Line 4C.23.
4C.23	Projected shadow RCV	Line definition should be updated to also include the two new proposed lines for the totex WINEP adjustment and for Land Sales

Grants and Contributions

We agree with the proposed changes to the APR tables to report section 185 diversions as inside the price control, consistent with PR19. However, it is important that the following line references are updated to reflect the new table 2E format and ensure that grants and contributions are accurately reported in table 2B totex analysis (including all grants & contributions) and table 2M revenue reconciliation (including price control grants & contributions after the deduction of income offset):

Table	Line	Proposed definition
2B: Totex analysis	2B.14	The totex tables should include <u>all</u> grants and contributions, therefore the definition should be changed as follows: <i>"The sum of 2B.122B.14 and 2B.202B.22 equals lines 2E.7 for water resources, 2E.142E.20 for Water Network Plus, and 2E.282E.32 for Wastewater Network Plus respectively."</i>
2M: Revenue reconciliation	2M.2	The revenue reconciliation should only include <u>price control</u> grants and contributions and should be after the deduction of income offset, therefore the definition should be changed to: <i>"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.8 and 2E.192E.3, 2E.16 and 2E.28."</i>

We assume that the split of grants and contributions by operating expenditure and capital expenditure will feed directly from Table 2E, such that grants and contributions in the 'Fully recognised in income statement' column are reported in the operating expenditure line (albeit actually reporting in 'Other income'), and grants and contributions in columns 'Capitalised and amortised (in income statement)' and 'Fully netted off capex' are reported in the capital expenditure line. It would be helpful if this was clarified in the line definitions to ensure consistency of reporting.

Revenue reconciliation – Table 2M

Table	Line	Issue
2M	Lines 4-7	We assume that the sum of lines 4-7 should equal the allowed revenue for water resources, water network + and Wastewater Network Plus, in outturn prices, as set out in the Final Determination. In the case of Bioresources the allowed revenue should reflect the actual volume of Sludge for the year, and not the estimated volume assumed in the FD.

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

		The values for Grants and Contributions and Income Offset needs to be inflated to outturn prices and this should be referred to in the line definition (i.e. will not match exactly with the Grants and Contributions feeder model, which are in 2017/18 prices).
2M	Line 9	The RAG 4.09 line definition for 'Adjustment for RFI' makes reference only to the Revenue Forecasting Incentive. The definition should also make reference to the Bioresources Revenue Reconciliation Model which is applicable to the Bioresources control (instead of the RFI).

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

Q3. Do you think that the transactions between the price control units, in particular for the sludge liquors which Network+ treats on behalf of Bioresources, are sufficiently transparent? If not, please give examples as to how this could be improved.

The additional lines in table 8C to report liquor recharges makes the transaction between the two price controls visible. However, there are some fundamental concerns that still need to be addressed. We have listed these below, along with recommendations, where appropriate.

- We recognise that establishing a consistent approach to pricing across the industry is an essential to ensure a level playing field within the Bioresources market. This is a significant challenge for the industry and there is a lot of uncertainty on how to move forward in understanding the performance data and assigning cost for sludge liquor management.
- Whatever principle is agreed for sludge liquors, we want to emphasise the importance that any definitions need to be unambiguous and consistently applied by all companies. Without this clarity and consistency, there risks a plethora of approaches (or different interpretations of reporting guidance), resulting in a lack of comparability across companies, which may create distortions in the Bioresources market. If the RAGs are not changed and the recharges remain ambiguous, then we would recommend a requirement for companies to state in their APR commentary the basis of the recharge to ensure transparency of the charges across companies.
- Our Mogden charges do not identify Ammonia as a separate component, similar to many of the other companies, and therefore we would question the requirement to report this. If the intention is that these recharges should be based on Trade Effluent charges (based on the “Mogden formula”), they should be based on the individual company’s published tariffs in line with how Trade Effluent customers are charged. This will ensure a level playing field with Trade Effluent customers for the provision of an equivalent service. We are not currently planning to modify our Mogden charges.
- At the workshop on 25th June it was apparent that many companies including ourselves did not currently measure liquor returns. This would be hard to do with inline instruments other than for flow and there would be a cost to collect the data. We would need to be able to justify the cost of additional data. We therefore recommend that standard industry engineering calculations are agreed, which can be applied to estimate the liquor loads generated from both raw sludge thickening and dewatering activities and digested sludge liquors for key components that may be used in a Mogden calculation. This would be at minimal (but not zero) cost.
- The approach to this data is likely to have a significant impact on actual business decisions with direct customer impacts. If there is a cliff edge to a very high value recharge, which later on is challenged or discredited, it may already have (inappropriately) led to some investment decisions that (retrospectively) may be deemed inefficient. This is particularly a risk for customers whereby sewage treatment works may already have been sized to manage liquor returns, so an investment decision (influenced by a new liquor recharge methodology) to build liquor treatment plants could mean construction of duplicate (potentially inefficient) capacity. We therefore urge Ofwat to act cautiously to avoid this, perhaps via implementation of a phased approach over AMP7 to the implementation of liquor recharges. This would enable ongoing review of the methodology, and to assess the emerging impact of those recharges on the both the Bioresources market and company approaches to managing liquor returns.

We would welcome the opportunity to work with Ofwat and the industry to identify, agree and set a consistent methodology across the industry to ensure comparability.

To make all transactions between price control units clear, we would suggest a separate line in the totex tables (i.e. 2B, 4D, 4E, 4J, 4K) to report these transactions. This would include (but not be limited to)

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

treatment of water sludges at sewage treatment works, the use of water at a sewage treatment works, treatment of sludge liquors at the treatment works. A separate table could then be added to list out these transactions separately.

Additional point re: Phosphorous removal

We would like to take the opportunity of this consultation to highlight the emerging challenges for Bioresources, associated with meeting more stringent environmental end of pipe consents, which may impact on sludge liquor transactions between Wastewater Network Plus and Bioresources.

As the Environment Agency is placing more stringent environmental consents and an increasing number of phosphorus consents on sewage treatment works, companies are looking at new and alternative technologies to a standard chemical dosing solution. We therefore need to clarify the treatment of these solutions where the solution may be resolved by a different Price Control, to the Price Control where the consent was placed. For example, to meet a phosphorous consent at a sewage treatment works, the lowest whole life cost solution from a company perspective may be to install a phosphorus recovery plant on the sludge liquors i.e. a standalone liquor treatment plant.

Under the RAG definitions, a standalone liquor treatment plant would sit within the Bioresources Price Control. However, the need (i.e. the phosphorous consent) is not a requirement of the Bioresources Price Control, it is applied to a Wastewater treatment works (i.e. within the Wastewater Network Plus control). Therefore, in this circumstance we propose that any phosphorous recovery liquor treatment plant, or any other asset designed to remove the phosphorous, should sit within the Wastewater Network Plus Price Control as this is where the requirement to meet the lower phosphorous consent sits, even though such an asset would be located downstream of Bioresources.

It is feasible to do a transfer price recharge from Bioresources to Wastewater Network Plus for removal of the Phosphorous from the sludge liquors to meet a Wastewater Network Plus regulatory driver. This is not the preferred option as it could lead to in AMP distortions in Bioresources as the capital cost would be recovered over the life of the asset through the recharge. This could also distort Bioresources market comparisons depending on the chosen solutions to meet the environmental consents.

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

Q4. Are there any practical presentational issues we should consider eg do any tables have too many lines to publish easily? Do you have any preference for landscape versus portrait format?

The primary purpose of data tables is to allow Ofwat to gather data from all across the water industry in a clear and consistent way. The secondary purpose, for those data tables published in the public domain, is to allow people to read, analyse and interpret the data contained within those tables.

In order to help rather than hinder the reader, the formatting of the public domain tables is an important aspect to consider. United Utilities recognise that Ofwat has made notable improvements in this area and fully support the ambition for further enhancements.

There are several 2020/21 tables, including 4B, 4L, 4M, 7B and 7D, which contain very large volumes of data. If these table are required to be published in the APR it will lead to an inevitable condensing of the dataset on publication, which will make the data extremely difficult to read and potentially even ineligible.

For 2019/20 reporting RAG 3.11 paragraph 2.14 allowed for Tables 3S and Tables 4J to 4W to not be included in the APR (although excel tables still published separately). The equivalent paragraph in RAG 3.12 allows for only Table 4B to be excluded. We question whether it would be preferable to extend this optional APR inclusion to include the additional large tables highlighted above to improve the presentation of the APR.

United Utilities does not have a preference for either a landscape or portrait default table formatting. Instead, we would advocate that the formatting of the table be dictated by whichever is the best presentational layout for the data it contains.

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

Q5. We are considering moving the 15 July deadline for the APR publication earlier in July so that we can more easily accommodate the in-period determinations. Would it be practical to implement such a change?

We believe that the current 15 July date strikes the right balance between timely publication and time for review and assurance. We consider that the 15 July deadline is already likely to be challenging in itself, particularly given that in AMP7 there are increases to the volume of data which needs to be captured, analysed, and reported. (For example, the number of performance commitment requirements will almost double.)

We are capable of bringing the reporting date forward if a decision to do so is taken soon. However by reducing the timeframe available to undertake audit and assurance processes it may increase the risk of data quality issues and may increase the need to use estimates or inferred data. This could potentially result in more Ofwat queries and so it is not clear whether, as a net effect, this would serve to accommodate in-period determinations or leave them just as challenging as is currently likely to be the case. On balance, we therefore support retaining the current July 15 deadline.

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

Q6. Do you agree that we should embed the ODI performance model within the annual performance reporting tables?

United Utilities does agree that the ODI performance model should be embedded within the annual performance tables. This approach would standardise the process, generate the required level of consistency and facilitate easier cross-company performance comparison and analysis.

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

Q7. Do you agree that companies should report performance against the PR19 asset health long list on table 3E?

If so, should information be restricted to water companies and regulators or made publicly available?

United Utilities fully supports the ambition of Ofwat to both promote and standardize asset health reporting. We also support the proposal to supplement some of the valuable asset health indicators that currently exist as common measures, such as unplanned outage and sewer collapses, with some beneficial additional metrics.

We believe a period of shadow reporting, outside of the public domain, is the best way for companies who have yet to adopt the proposed additional measures to improve their reporting processes and obtain consistency. United Utilities believe this is a process that previously worked well in AMP6.

With regard to the five metrics proposed in table 3E:

Properties at risk of receiving low pressure (Number of properties per 10,000 connections) – RAG 3E.1

We have already adopted this metric as one of our performance commitments for AMP7. Our bespoke commitment utilises the same definition as the one proposed in the asset health long list, which tracks the number of properties receiving water pressure below the guaranteed standard. This level of service is defined as a flow of nine litres per minute at a pressure of 10 metres head on the customer's side of the main stop tap.

As an existing performance commitment, our performance against the metric will be made publically available throughout AMP7. As the metric focuses on an area of service that we know is important to customers, we would have no objection to continue to report against this measure going forward. However, we would note that performance against this metric provides only a weak indicator of underlying asset health. Low pressure is more likely an indicator of issues with asset capacity rather than asset health.

External sewer flooding (Number of incidents per 10,000 sewer connections) – RAG 3E.3 and Sewer blockages (Number per 10,000 sewer connections) - RAG 3E.4

We have already adopted an external flooding metric as one of our performance commitments for AMP7, utilising the same definition for external flooding incident classification as described in the asset health long list. However, our bespoke commitment reports on the number of external flooding incidents that have occurred in each financial year, as opposed to the number of incidents being normalised per 10,000 sewer connections.

Likewise, we have also adopted a sewer blockages metric as one of our performance commitments for AMP7, again utilising the same definition as described in the asset health long list. However, our bespoke commitment reports on the number of sewer blockages that have been reported and cleared in each financial year, as opposed to the number of incidents being normalised per 10,000 sewer connections.

As existing performance commitments, our performance against these metric will be made publically available throughout AMP7. As both metrics focus on an area of service that we know is important to customers, we would have no objection to also reporting against the normalised view of performance

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

reporting going forward. However, performance on both of these metrics is not solely attributable to issues relating to asset health.

We believe there would be real value in all other WaSC's reporting against these metrics in a consistent way, so therefore would support the adoption of the normalised view across the industry. We would also recommend that the external flooding measure be supplemented by additional reporting on both 'incidents reported by the customer' and 'incidents reported by the company', as is currently done with internal flooding.

Unplanned maintenance – non-infrastructure (water) (number per year) - RAG 3E.2 and Unplanned maintenance – non-infrastructure (wastewater) (nr) - RAG 3E.5

During the price review process, United Utilities took the decision not to adopt either of these metrics from the asset health long list. This is due to the fact that we believe there are inherent issues in the measure definitions and that they are not a good indicator of asset health. These issues include:

- The measure requires a company's asset base to be 'constant' in order for performance trends to be seen as meaningful. This is potentially flawed and could lead to changes in performance over time simply by the change in volumes of assets either registered or de-registered.
- The measure could potentially lead to perverse disincentives to improve maintenance by discouraging accurate recording or classification of maintenance activity.
- Company comparisons of performance would not be a valuable indicator, as legacy asset bases vary across the industry both in terms of type and number.
- The system each company uses and the method of recording maintenance activities vary across the industry. Therefore clearer definition of an 'unplanned job' would need to be developed and agreed.
- The moves in the industry to increasing proactive maintenance, based upon condition based monitoring would need to be explicitly excluded from the measure. These jobs can look a lot like 'unplanned' work as they are not cyclical maintenance at predictable frequencies, but may involve fairly rapid turnaround from the identification of a condition indicator to the maintenance being carried out. This is not 'unplanned' but could appear so, despite being best practice.
- There is no consideration on the criticality of assets. We have many assets with a reactive maintenance strategy because this is the most cost effective approach to their maintenance, due to their relatively low criticality.
- We previously adopted similar metrics from PR09 onwards, but then stopped reporting on them when it became apparent that both the data and resultant metric output was varied and an unreliable indicator of asset health.

Due to the issues highlighted above, we therefore disagree that companies should be asked to report against these two metrics. However, in the event that either of them are to be adopted by the industry, we would advocate a convergence measure approach to measure definition, followed by a period of shadow reporting without the data being made publically available.

On Asset Health performance monitoring in general:

It's recognised that a single metric cannot provide a fully comprehensive insight into asset health. A key issue is that too many of the asset health metrics are lagging performance related measures that tell you something about how the assets are performing today but very little about the underlying condition of

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

assets or how long they might last. We advocate the development of an asset health metric framework for the sector incorporating measures associated with:

- Wellness – are the assets performing well today?
- Fitness – is the underlying condition of the assets strong enough to cope with day to day life and shock events?
- Life expectancy – how long before the assets need to be replaced?

We think a framework based around these three concepts would provide a deep and insightful view of the real asset health of companies and by framing the language around these “health” terms, it will be helpful for opening up the debate with stakeholders and customers about water sector performance on asset health. There are challenges for companies and regulators alike. Which measures are the most appropriate to use for each component of the framework to deliver a robust assessment of asset health without creating undue burden for data collection? How do we get convergence in data definition and standards to ensure adequate consistency between companies? How do we all gain confidence that such a framework can provide an accurate assessment of future efficient maintenance requirements with all the appropriate customer safeguards?

We would support a collaborative effort between companies, regulators and other stakeholders to pursue a more future looking, risk based approach to the consideration of asset health at Price Review 2024 and beyond. Such a framework, if it can be achieved, would enable the sector to have an informed and mature conversation about how we want to balance risk and cost for the next AMP period and the AMPs that follow.

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

Q8. Developer services are open to competition. Most site-specific services are contestable and can be provided by an undertaker (incumbent company or NAV), self-lay provider (SLP) or (primarily in the case of sewers) developers.

We are introducing a new table 2N for developer services to measure the level of third-party activity in areas served by incumbent companies. This should enable us to measure that activity in a way that ensures the information is insightful and consistent. It will provide an insight on how competition in developer services is evolving over time.

We have also added granularity for our cost information for growth-related expenditure in tables 4L and 4M. We propose a re-definition of our cost lines to capture the main elements of growth activities, and to capture specific on-site and off-site costs separately.

We welcome comments and views on our proposed approach.

We welcome the move for more granular reporting. However, it is critical that Table 2N is moved to section 4 of the APR, as this table reports non-financial data and therefore should not be subject to audit opinion by a financial auditor. We would expect section 2 to include financial information only as in previous years.

In addition, to ensure that information provided is consistent we believe that companies would benefit from additional clarity being added to the line definitions provided in RAG 4.09.

We would expect the total number of new residential and business properties (provided by incumbents and SLPs) added to the water network as reported in table 2N lines 5, 6 and 12 to be the same as the total number reported in table 6C lines 11 and 12 (total number of new business properties connections and total number of new residential connections)

We would expect the total number of new residential and business properties (provided by incumbents and SLPs) added to the wastewater network as reported in table 2N lines 5, 6 and 12 to be the same as the total number reported in table 7E lines 1 and 2 (residential properties connected during the year and business properties connected during the year)

If this is the case it would be helpful to include a validation check in the excel tables, and add a clarification note to the RAG 4.09 line definitions which states *“For the water column, the sum of lines 2N.5, 2N.6 and 2N.12 should equal the sum of lines 6C.11 and 6C.12. For the wastewater column, the sum of lines 2N.5, 2N.6 and 2N.12 should equal the sum of lines 7E.1 and 7E.2.”*

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

Q9. We currently calculate the reconciliation in table 2K using infrastructure charges before any efficiency discounts. We are aware of some views that this should be changed to use infrastructure charges after discounts.

What are your views on this?

We consider that a discount should only be recognised for amounts that will not be recovered from developers and borne as a cost to the company. We suggest that the line definition for 2K.2 is expanded to make reference to this i.e. “The value of the discounts applied to infrastructure charges, which are not recovered from developers and borne as a cost to the company”.

Our overall aim is that developer charges recover our expected infrastructure network reinforcement costs, and as such we do not recognise a discount in Table 2K. We have different infrastructure charges to reflect the demand placed on our network. For example, there is a lower rate infrastructure charge applicable for developments in relation to water efficient homes or where properties are built with no surface water connection to the existing public sewer. Where developers implement these sustainable developments it places less demand on our network which reduces our spend on infrastructure network reinforcement. Likewise, where developers do not adopt the sustainable solutions it places greater demand on our network, which means we have to spend more on infrastructure network reinforcement.

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

Q10. Is there scope to rationalise the number of areas where we ask for specific assurance?

United Utilities recognises the importance of reliable, accurate and complete data to support both internal decision making and external reporting. With a strong assurance framework in place, we look to inspire and secure confidence in our plans and data with customers, regulators and other stakeholders. During AMP6 we have continued to build on a fundamentally strong assurance regime – based on three lines of assurance – and delivered beyond the minimum requirements for a company in the “self assurance” category in Ofwat’s previous Company Monitoring Framework. We consider that this approach has worked well and we will continue to develop it in AMP7. We welcome the flexibility that Ofwat’s approach for AMP7 will provide companies in tailoring the assurance and reporting approach to particular circumstances and recognise that the less prescriptive approach places added emphasis on companies taking responsibility and accountability for assurance and reporting.

Board statement in relation to the accuracy and completeness of data and information

In considering the statements that Boards should make in support of the accuracy and completeness of information provided to Ofwat and/or published during the year, it is of course entirely reasonable to expect that any known exceptions should be identified and explained. Failure to do this would undermine confidence in the company’s reporting. We therefore propose to report any areas of risk or concern that the Board identify through this approach in the risk and compliance section of the APR.

In terms of providing a statement which supports the accuracy and completeness of data more generally, we believe that our Board should provide a statement which sets out clearly that:

- there are reasonable processes and procedures in place such that the Board is satisfied that sufficient internal systems of control are in place to record and report high quality data;
- that data published or supplied to Ofwat have been subject to a risk based assurance approach;
- that in the Board’s opinion this supports that the data provided by the company has been – to the best of its knowledge – compiled on an accurate and complete basis; and,
- that any material exceptions to this have been identified and corrected promptly.

This reflects the role of the Board in this area, which is principally to ensure that there is appropriate governance, accountability and control of data. This is distinct from any suggestion or implication that the Board has reviewed, signed off and/or recalculated each individual data item which may have been supplied to Ofwat or published more widely. Clearly, whilst it is a reasonable expectation that the Board should have overall accountability for the systems and governance in place to support reporting of data, it would be obviously unreasonable and unrealistic to infer or expect that the Board collectively or individually could be accountable for every individual data item produced by the company’s staff or management, whether or not such data items are shared or published externally. The Board can and does – however – stand behind the principle that it is accountable for the overall framework, approach, governance and culture which supports the company’s information gathering and publication.

Rationalisation of assurance

From the regulator’s viewpoint, consistency of reporting across the industry is essential, and this requires a specific level of assurance that common methodologies have been understood and followed correctly.

Therefore, **United Utilities does not advocate the rationalisation of assurance associated with any common areas of reporting and regulatory accounting.**

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

In addition, for those areas that are subject to third party assurance requirements, it is important that this is fully enforced, to ensure companies are held to the same standard of accountability (e.g. Table 1F Financial Flows, as detailed in our response to question 1).

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

Q11. We currently collect information on property and customer numbers, including voids etc, in various places in the APR. We could move all of this information into a single table – what are your views on this?

Are there any other useful metrics for property and customer numbers which we should specify?

We would support all property data being reported in one table as suggested by Ofwat. Reporting would be simplified if all property information (for water, wastewater, household, non-household, etc) were to be reported in a single table rather than spread across multiple tables. A new dedicated property table should be created for this purpose.

Table 4A previously included a line for the number of Void households, connected for either a water service only, a wastewater service only or both services. This line is required for the calculation of the Household Voids ODI. This line has been removed from Table 4A, but is not included in any other table – whilst Table 6C includes Voids connected for water and Table 7E includes Voids connected for wastewater, neither of these tables shows the total connected for either a water service only, a wastewater service only or both services. It would be appropriate to include Household voids in Table 2F since this table already contains occupied household properties in the same format.

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

Q12. Table 4U line 23: Total volume of network storage.

We are aware that companies have had difficulties completing this item and are concerned that this may mean there could be inconsistencies across the industry.

How might this definition be improved to avoid ambiguity and improve consistency of reporting?

United Utilities has undertaken a number of updates to its volume of Network storage methodology over recent years, as we strive to enhance both the accuracy and reliability of this dataset. These updates include:

- Increasing the level of confirmed and validated sewer information (length, diameter and shape), thereby reducing the usage of inferred data.
- Where inferred data is still partially utilised (transferred assets and surface water assets), we have standardised the calculations.
- Incorporated the use of gradient into the sewer length assessment, as opposed to a single linear assessment that had been used historically.

We believe that some small changes to the current approach could help to improve the consistency of reporting across the industry and improve the overall accuracy of reported data sets.

- Increased granularity under this reporting line, utilising sub-headings of online and offline storage volumes.
- Standardise the calculations within the definition, particularly where asset data needs to be inferred. We believe that we have developed a reproducible methodology for these calculation and would be happy to share this approach.

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

Q13. Strategic water resources – we have included more granular information on bulk supplies revenues and volumes in our proposed table 4A in order to promote trading activity. Currently, for cost information, we have a single line for third party costs, of which bulk supplies is a constituent. We asked companies to forecast individual costs for new bulk supplies in their PR19 business plans. Is it practical to disclose granular cost information for bulk supplies?

In most cases identifying the specific direct costs of bulk supplies is difficult as they generally do form part of a larger integrated network where the allocation of cost specifically to that bulk supply is not practical. To date U UW has overcome this by allocating the costs to third party based upon a proportionate method of total costs by flow for the upstream services correlated to total volume for the bulk supplies (i.e. a unit cost approach). This takes into account a proportion of all costs as opposed to just direct and is consistent with our PR19 submission.

We do not agree that more granular cost information for bulk supplies is required. Given that our network is mostly integrated, we believe our current approach of average costs is appropriate. In addition, we already publish access prices (by resource zone) and wholesale charges each year, so this should be sufficient in setting expectations on pricing for potential new entrants.

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

Q14. Social tariffs – we have proposed additional information to table 2F. Is this sufficient to provide a view of company activities in this area? What additional information should we consider adding to this table?

We support the addition of the number of customers on a social tariff scheme and disclosure of the amount of revenue voluntarily foregone.

In addition to the proposed disclosures in table 2F, we believe that it is highly important for the amount of revenue cross-subsidised by customers not on a social tariff to also be disclosed; aligning with the recent data request entitled “Residential Retail – social tariffs data request final” to which we responded in June.

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

Q15. We currently have a source type for direct effluent reuse. This is where treated effluent is diverted to network plus price control activities (either via a raw water transport asset, raw water storage asset or to a water treatment works for further treatment and treated water distribution). We define direct reuse as when the effluent does not return to the environment or to the water resources price control activities (abstraction asset before entering the water treatment works).

Although we consider indirect effluent reuse as being where an effluent discharge is diverted to a location (environment or water company water resource asset) purely for the purposes of abstraction for treatment and treated water distribution, we do not include this currently in the reporting of costs or sources.

Where do you currently report these sources and costs? If we were to introduce an indirect reuse source category do you agree with our definition above?

United Utilities does not currently undertake any direct effluent re-use in either the water resources or Water Network Plus price controls.

Likewise, none of our water supply sources are located where an effluent discharge has been diverted, purely for the purposes of extraction. As such, we also do not currently undertake any indirect effluent re-use, under the proposed Ofwat definition.

As such, we have no existing requirement to report against these sources or its associated costs. Whilst we have no objections to the proposed definition, we recognise this is a complex area and would welcome further Ofwat/industry discussion to better understand the regulatory accounting treatment for such arrangements.

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

Q16. In section 8 we have included new data requirements for Bioresources. Should we collect more data to support the Bioresources market?

The existing Bioresources annual performance reporting has generally worked well and significant progress has been made on ensuring consistent treatment of Bioresources across the sector. Despite this, we would like to propose both changes to existing reporting lines and additional data requirements, in order to provide information to both existing and potential participants to support the Bioresources market.

We believe that reporting should help deliver the following three aims:

1. Provide useful information for potential participants in a Bioresources market – within this, it needs to be recognised that market participants will already have their own knowledge about AD technology and logistics, so the tables should focus on monopoly information that might be unavailable to new entrants, and therefore could be helpful.
2. Manage a level playing field in the sector – it is really important to ensure that cross border flows between Bioresources and Wastewater Network Plus, or external parties (e.g. for energy and liquors), are assessed and valued consistently between companies, else market distortions can arise.
3. To support Ofwat in other duties on regulatory compliance, or to support price control activities (e.g. cost assessment).

We reviewed the lines proposed in tables 8A to 8D and the additional tables issued on 24th July 2020:

- Additional Bioresources table 1 – Energy in Bioresources
- Additional Bioresources table 2 – Renewable energy subsidies
- Additional Bioresources table 3 – Imported sludge liquors treatment
- Additional Bioresources table 4 – Transport data

We have provided comments on individual lines within all these tables under our response to Question 1. Further comments about 'Additional Bioresources table 3' and sludge liquor transactions between Wastewater Network Plus and Bioresources are provided in our response to Question 3.

Whilst we agree that there is a requirement for new data for Bioresources, we do not believe that the proposed lines fully address the issues, in order to meet the aims set out above. At a high level, we have two principle areas of concern that the proposed reporting fails to address:

- Reporting at the price control boundary. Sludge which is thickened to <10% dry solids could be either a Wastewater Network Plus activity or a Bioresources activity. The proposed reporting will not reveal work done (in sludge thickening, transport or liquor treatment) within the Wastewater Network Plus price control. This is dependent on the asset base and company logistical decisions. Unless there is disclosure of activity which has the potential to be assigned to, or move (now and in future) between, either Wastewater Network Plus or Bioresources price controls this may have a distorting effect on the Bioresources market: as Companies will have varying proportions of work done in the Wastewater Network Plus and the Bioresources price controls resulting in differences in average costs for Bioresources activities.
- Reporting in Bioresources upstream services. The proposed reporting does not effectively align work done with accounting areas. This will lead to a lack of transparency in transactions between price controls and inhibit fair comparisons between companies

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

Furthermore, we believe that there are emerging challenges which will need to be addressed by the Bioresources market and recognise this consultation as an opportunity to enhance reporting to address these issues.

As such, we have taken a wider view of the reporting requirements and proposed three tables, which are a combination of existing and new lines, which we believe would be more appropriate to support the Bioresources market (alongside Table 8B). The proposed tables are set out in Appendix A of the document, along with a detailed commentary explaining each of the proposed lines and a discussion of the reasons why these lines have been suggested. A summary is provided below:

Proposed Table	Data Requirements	Lines
8R Sludge Production and transport	Sludge Production Sludge Quality Raw Sludge Thickening and Dewatering Intersiting Transport	Existing (8A.1-8A.4) and New Existing (8A.19) and New New New
8S Sludge Treatment	Sludge Treatment Sludge Liquor Returns Energy Recovery and Use	Existing (8D.1-8D.7) New New
8T Sludge Disposal	Sludge Disposal Sludge Disposal Logistics	Existing (8A.6-8A.13) and New Existing (8A.17-8A.18) and New

We believe the proposed tables would provide multiple benefits:

- Tables are aligned to the accounting areas with additional reporting lines to reveal activity upstream services accounting areas.
- Disclosure of sludge activity which has the potential to be assigned to either Wastewater Network Plus or Bioresources price controls to increase understanding of the Bioresources market and enable fair comparisons between companies (which are used in price review cost assessment).
- Reveal information about sludge quality which has the potential to increase the cost of sludge treatment and reduce the potential opportunity to generate revenue.
- Manage a level playing field in the sector by ensuring that cross border flows between Bioresources and Wastewater Network Plus, or external parties (e.g. for energy and liquors), are assessed and valued consistently between companies, else market distortions will arise.
- Provide a consistent definition of sludge treatment, and distinguish activity from sludge thickening and dewatering.
- Prepare for future challenges, for example identifying additional work done in Bioresources to recover P in sludge liquors to meet a lower phosphorous consent at a sewage treatment works.
- Reveal adequate market information such as sludge traded into a company, sludge transport activities undertaken by a third party or income received from sludge disposal operations, not revealed by the proposal.

Where additional reporting lines are required to deliver the aims above, it is important to recognise the potential cost of collecting data. Therefore the need for any new data that requires additional investment in measurement should:

- (a) be subject to a higher standard of “need” to report that data, and

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

(b) potentially be introduced gradually e.g. by relying on standard engineering calculations first, extrapolation from partial measurement where available, and rising to 100% measurement over time.

In conclusion, we do believe that more data should be collected to support the Bioresources market. We have developed a proposal which uses a combination of new and existing lines, and which we believe will appropriately support the Bioresources market and ensure consistent treatment of Bioresources across the sector (set out in Appendix A). We would welcome the opportunity to continue working with Ofwat and the sector through a sludge working group to progress in-depth on reporting requirements to support the Bioresources market.

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

Q17. We are introducing a new table 9A for the reporting of issues relating to the innovation competition. This is to collect the information required for the 'PR19 Innovation funding reconciliation model' in a format that will also provide stakeholders with relevant information to monitor how the company is performing against its allocated innovation competition fund price control revenue. We propose in section 3.16 of RAG 3.12 that companies provide commentary on its innovation competition spend.

Do the proposed new table, line definitions and commentary requirements capture the required information to support the reconciliation process? What additional information should we consider adding to this table?

We welcome the inclusion of innovation competition reporting within the APR and believe the proposed Table 9A, subject to the points raised below, can provide stakeholders with the necessary information to effectively monitor performance.

We note that the proposed pro-forma table 9A only includes information for the current year. To improve the relevance of the information to stakeholders, this table would benefit from also including an additional column reporting the cumulative position for the AMP-to-date (albeit not required specifically for 2020/21 reporting, being the first year of the AMP). There is likely to be timing differences between when revenue is received from customers, bids are awarded and expenditure occurred and so it is the cumulative AMP position which is most relevant, particular when considering the total funding to be returned to customers (line 9A.21).

As flagged in our response to Ofwat's March 2020 PR19 reconciliation rulebook consultation, we believe additional clarity is required in relation to how the total amount returned to customers is derived (see line 9A.21 in the below table). In addition, we have included the below comments/points of clarity it would be helpful to check our understanding to ensure we complete this table in line with expectations.

Line reference	Line title	Comment
9A.1	Allocated innovation competition fund price control revenue	We understand this to be the allowed price control revenue for the current year only (and not for the 5-year AMP total)
9A.2	Price control revenue collected from customers	We would expect this to usually be the same number as line 9A.1, except where companies may decide not to collect all their allowed allocation of revenue.
9A.3	Non-price control revenue (e.g. royalties)	If this line is included for supplementary information only then we can understand its inclusion. However, our understanding is that non-price control revenues should not be included in amounts transferred into the innovation competition fund and so it is important that this line should <u>not</u> feed into the total reported below on 9A.4.
9A.4	Revenue collected from customers and transferred into the innovation competition fund	The table pro-forma shows this as a calculated cell. We believe this should be equal to line 9A.2 and not include 9A.3 (as noted above). For most companies we would typically expect lines 9A.1, 9A.2 and 9A.4 to be the same number.
9A.9 to 9A.12	Actual expenditure on an innovation project funded directly through the innovation	It would be helpful to clarify that any overspend on individual projects are intended to be recorded on these

United Utilities response to the Ofwat consultation Annual Performance Report Consultation 2020-21

	competition. Excludes business as usual expenditure on innovation activities that is already funded through totex.	lines and not, alternatively, on the shareholder funded lines (9A17-20)
9A.17 to 9A.20	Actual expenditure on an innovation project that is not funded through the innovation competition or through totex.	We understand these lines to include any company contributions as agreed at the start of the project. It would be helpful to clarify that any overspend on individual projects are not intended to be recorded on this line but on lines 9A.9 to 9A.12 above
9A.21	The total amount which the company will be returning to customers, in line with the reconciliation process.	In line with our response to Ofwat's March 2020 PR19 reconciliation rulebook consultation, we believe it is unclear how differences to assumed cost within delivery will be accounted for within the reconciliation process. As such, we are not sure of how this cell is calculated from the above rows in the table and further guidance is required. This line will probably need to be set as an input, rather than a calculation, cell.

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

Q18. We propose new reporting requirements for small companies:

- a. Customer-focused performance summary,**
- b. Per capita consumption (PCC),**
- c. Leakage; and,**
- d. Financial security.**

What are your views on these proposals?

We have no comments to make on the proposed reporting requirements for small companies.

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

Q19. What are your views on how we should collect the information to calculate the bilateral entry adjustment?

The proposal seems appropriate, however we would note that the reporting requirements will need to be considered in greater depth when further work is undertaken in relation to bilateral entry.

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

Q20. We highlight proposals for Greenhouse gas emission reporting in section 4 ‘Future developments in performance reporting’.

- To what extent do you agree or disagree with these proposals and why?**

We fully support the proposal to report industry greenhouse gas emissions in a consistent and comparable way.

United Utilities strongly supports the Ofwat strategy to strengthen the sector’s approach to climate mitigation and adaptation in particular the intention to monitor industry’s greenhouse gas emissions in a consistent and comparable way. Sharing information fits with our company purpose and what matters most to our stakeholders i.e. trust, transparency and legitimacy. We have disclosed our annual emissions since 2007 in the annual reports published available on our website (<https://www.unitedutilities.com/corporate/investors/Reports-and-presentations/annual-reports/>). Our disclosures are under regular review and the latest report features how we meet the Taskforce for climate related disclosure (TCFD) recommendations.

We would like to use existing reporting practices for Ofwat performance reporting. We think this is best achieved through using the UKWIR Carbon Accounting Workbook (CAW).

When defining what and how companies should provide information, it is critical to recognise there is substantial existing reporting practice and legislation. Using existing reporting guidance and standards will give the sector credibility in its GHG reporting and disclosure whilst minimising any additional reporting burden.

All UK water companies must comply with the 2019 Environmental Reporting guidelines including streamlined energy and carbon reporting guidance and publish a report on their annual greenhouse gas emissions. The guidance builds on established practices and GHG accounting methodologies and disclosure programmes such as the GHG Protocol Corporate standard, ISO 14061-1 and CDP. If the Ofwat objective is simply to monitor company GHG emissions and progress the data in these public domain documents could be collated for the industry with no additional burden on individual companies.

Alternatively United Utilities (along with the rest of the industry) use the UKWIR Carbon Accounting workbook to collate relevant activity data and estimate the annual emissions for reporting. This information is used in our company disclosures, for the Discover water data share and for other greenhouse gas emission modelling and we propose it could also be used to provide report to Ofwat. If companies were to provide a copy of their “Results by Accounts” sheet from the Carbon Accounting Workbook then this could with minor amendment meet almost all of requirements outlined.

	“Results by accounts” sheet from the CAW
Gross & net emissions	✓
Location based & market based	✓
Water & Wastewater split	✓

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

Breakdown by activity source	✓
Total emissions by GHG	✓ With minor change to report
Embedded / Embodied / Capital Carbon	Only limited outsourced activities

- **Could companies publish annual gross and net greenhouse gas emissions (in tCO₂e) for both water and wastewater?**

Annual gross and net greenhouse gas emissions could be reported for both water and wastewater

Performance reporting based on the “Results by accounts” sheet from the Carbon Accounting Workbook would include gross and net operational GHG emissions using both location and market based methodologies, with wholesale emissions split in a consistent manner between retail, water and wastewater.

We can provide a high level breakdown of this annual emissions data

If companies were to share data in the “results by accounts” it would include the following emission categories and totals.

Scope 1 emissions

- Direct emissions from burning of fossil fuels (including CHP generated onsite)
- Process and fugitive emissions
- Transport: Company owned or leased vehicles

Scope 2 emissions

- Total grid electricity used by company (including CHP electricity purchased)

Scope 3 emissions

- Business travel on public transport and private vehicles used for company business
- Outsourced activities (if not included in Scope 1 or 2) Energy and other
- Total grid electricity used by company (including CHP electricity purchased) – Transmission and Distribution

Emissions reductions/accounting

- Exported renewables (generated onsite and exported)
- Exported biomethane (generated onsite and exported)
- Green Tariff electricity purchased

Gross operational emissions

Net operational emissions

Scope 1 emissions	Direct emissions from burning of fossil fuels (including CHP generated onsite) Process and fugitive emissions Transport: Company owned or leased vehicles
Scope 2 emissions	Total grid electricity used by company (including CHP electricity purchased)
Scope 3 emissions	Business travel on public transport and private vehicles used for company business Outsourced activities (if not included in Scope 1 or 2) Energy and other

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

	Total grid electricity used by company (including CHP electricity purchased) – Transmission and Distribution
Emissions reductions/accounting	Exported renewables (generated onsite and exported) Exported biomethane (generated onsite and exported) Green Tariff electricity purchased
Gross operational emissions	
Net operational emissions	

Total annual greenhouse gas emissions could be broken down by individual greenhouse gases

The emissions of each greenhouse gas by line item are already included in the CAW as part of the calculation of the total in tCO₂e. A breakdown of the total footprint by types of GHG could easily be added to the performance reporting (as soon as the 2020-21 reporting year) with only minor changes to the workbook made as part of the annual UKWIR refresh project to sum up the values.

Could companies provide annual gross and net greenhouse gas emissions (in tCO₂e) for both operational and embedded emissions?

“Embedded” is not a standard term. There must be a clear definition and a common industry approach for calculation and reporting.

We are uncertain what is meant by the term “embedded” in this consultation and ask for clarification. We think you mean the greenhouse gas emissions associated with the processing and transport of materials and the on-site activity related to construction and refurbishment of built assets which are usually referred to as embodied or capital carbon. We will use the term embodied carbon for this document. If our assumption is correct, then this could either be estimated and reported on an annual basis as part of scope 3 emissions or be estimated on a project by project basis and captured at project in use, on a life span basis.

Estimating annual emissions from construction within scope 3 reporting

Scope 3 emissions reporting is optional in the GHG Protocol Corporate reporting standard. The annual footprint water companies report includes 3 out of the 15 Scope 3 emissions categories. “Outsourced activities (if not included in Scope 1 or 2) Energy and other” is the only one of these categories within the current boundary that could be considered embodied carbon”.

UU corporate disclosures have a different scope 3 boundary which includes emissions from sludge disposal but still excludes other upstream and downstream emissions related to construction. We have recently made a pledge to rescreen the scope 3 emissions, and to set a scope 3 specific target based on a potentially revised boundary in 2021. This revised boundary may include additional scope 3 emissions categories which could be related to construction activity.

We would be open to working with the industry to agree how to report annual emissions from construction within scope 3 reporting

We are not able to provide information on embodied emissions outside the current reporting boundary but are open to future developments where more optional scope 3 emissions might be included in common industry reporting. If additional scope 3 categories were to be included the methodology would have to be defined and agreed, at an industry level and be consistent with the GHG protocol guidance, and we expect this to be picked up through an industry wide UKWIR project (we will suggest and promote this project at the next available opportunity). On completion of the project, we could then report additional annual emissions for the following full reporting period at the earliest.

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

Understanding the whole life emissions arising from capital investment

An alternative to including emissions from construction within scope 3 reporting is to estimate on project by project basis and capture at project in use, on a whole life or life span basis. The relative impact of capital investment can be evaluated, either compared to a baseline prior to development or between two or more solutions. Impact over a lifetime should be used as this reflects both how costs and benefit can vary year by year, not necessarily with any intervention, and also the total emissions from cradle to grave i.e. construction, operation and maintenance and asset disposal.

The UKWIR framework for accounting for embodied carbon in water industry assets gives guidelines for “estimating the carbon embodied in constructing and maintaining capital assets”. The framework was published in 2012 (Ref. No. 12/CL/01/15) so predates the GHG protocol reporting standard. It was intended to be used to estimate the whole life emissions impact for schemes and appraise alternative investment options and so could provide the basis to develop an industry approach if it were updated.

Independently UU is in the early stages of changing investment appraisals to incorporate lifetime GHG emission costs (internal carbon price) in the NPV for alternative solutions/materials. Our AMP7 performance commitment ‘Enhancing Natural Capital Value for Customers’ also reports on a lifespan basis (using a 30 year model) and compares ‘added natural capital benefit value’ of a nature based solution compared to a conventional solution. The natural capital value is calculated from a specified list of ecosystem services which includes GHG removals such as through peatland restoration and woodland creation.

Whole life emissions (and nature based solutions (NBS)) may change the way in which totex is spent.

As further discussed in Q21, projects are likely to be delivered for the benefit of multiple drivers and across different price controls. Integrated “green” solutions that are chosen holistically because they deliver best net natural capital value (incorporating lowest whole life emissions) will have a different balance of spending in favour of operational interventions over multiple AMPs. As such “green” solutions will become increasingly prevalent and this should be reflected in Ofwat’s future approaches to cost assessment.

Where GHG emissions / removals are components of different models there should be a consistency of approach and ideally each should follow established standards (such as the GHG protocol) and use consistent emissions factors.

In conclusion, we can and do report on operational emissions and could include this information in our Ofwat annual performance reporting using existing or amended reports from the Carbon Accounting workbook

With respect to embodied emissions, in common with the challenge for Nature Based Solutions (see Q21), clear consistent definitions and methodologies are needed to enable consistent reporting between related measures and across the industry. We propose that a holistic measure based around either natural capital valuation or whole life GHG emissions is created to enable consistent reporting of all solutions across the industry. Careful consideration will need to be made to ensure PR24 is cost reflective and that any unintended consequences in RAG and cost assessment are considered as “green” solutions become more prevalent. We are happy to support Ofwat with this and would expect it to be picked up through an industry wide UKWIR project (which we will suggest and promote at the next opportunity).

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

Q21. We highlight proposals for nature based solutions reporting in section 4 'Future developments in performance reporting'.

- **To what extent do you agree or disagree with these proposals and why?**

We fully support the proposal to report nature based solutions (NBS).

NBS are a valuable inclusion in the design suite available to water companies to meet their maintenance and quality drivers across water and wastewater. We have used NBS for a number of years as they can deliver business requirements, at the lowest whole-life cost, whilst also providing additional natural capital benefits which conventional solutions do not. We were one of the first water companies to fund catchment interventions in our Sustainable Catchment Management Programme (SCaMP) following lobbying of government, regulators and stakeholders in 2005, resulting in investment to 57,000 Ha of UU owned and common land. Following the success of SCAMP we have developed a catchment systems thinking approach (CaST) which allows individual projects decisions to be made in the context of the catchment, or system, in which they are situated. Our plans for AMP7 include the use of NBS, often working in partnership with other organisations for design, funding and/or delivery.

We would like to work with Ofwat and the wider industry to develop the reporting requirements for NBS, building on the learning from our AMP7 performance commitment. We had our first meeting with Ofwat's Environment team in mid-August to explore this issue further.

Our 'Enhancing Natural Capital for Customers' AMP7 performance commitment focuses on the delivery of NBS and has enabled us to understand the pros and cons of reporting in this area. Our proposal for NBS reporting would build on our learning from this measure which is currently narrowly focused on water quality delivery, primarily via the WINEP. We would propose that a more holistic measure, potentially as an industry standard metric, is developed for AMP8 to allow the full benefit of NBS to be consistently recorded, based on the natural capital valued delivered. We also propose that this metric is not intrinsically linked to water quality delivery, as our AMP7 measure is, to allow all NBS benefits and therefore solutions to be included. This would have some overlap with the carbon reporting requirement, discussed in question 20, where natural solutions can be used to reduce the carbon impact of our business.

- **Which type of nature based solutions do you think should be included in any reporting, and how could they be reported against?**

We propose that nature based solution delivery is reported based on natural capital value (£m) delivered.

This data would need to be captured in a company level performance table which crosses all price controls. The cost of delivering these solutions could be captured within existing finance tables with the costs being captured in those price controls delivering the activity, rather than that which receive the benefit of delivery of maintenance or quality drivers. A recharging methodology may need to be developed and agreed within Regulatory Accounting Guidelines. For example; an integrated project may be delivered across Water Resources, Wastewater Network Plus and Bioresources. The benefit of doing this may be entirely within the Water Resources price control but the overall natural capital benefit would be to the customers and environment (shown in the company wide performance table). We would be happy to work with Ofwat to gain company consistency on reporting, potentially in an industry working group to build upon the lesson we learnt from our AMP7 performance commitment, to develop natural capital as an investment. This is an issue we discussed with Ofwat's Environment team in August.

NBS should be relevant to all price controls.

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

NBS are not applicable to deliver the requirements of every driver. However, they do have a wide application to meet quality and maintenance drivers across water and wastewater where there is sufficient land available and/or an engaged group of external stakeholders. The most common NBS that we have used are;

- wetlands;
- reedbeds;
- sustainable urban drainage systems (SuDS);
- natural flood management;
- catchment interventions which include leaky dams, woodland creation, peatland restoration, slurry storage, cover crops etc.

We are also currently aware of other beneficial NBS which benefit natural capital, but are less frequently used such as reactive media within constructed wetlands as part of wastewater treatment and the use of biosolids applications as an alternative to fertilisers to improve water quality. We therefore propose that an 'other' category is also available (with a definition of NBS applied) so that NBS are not constrained to a pre-determined list which may stifle future innovation. Natural capital valued delivered by each of these solution types could be reported.

NBS benefit calculations should consider the natural capital delivered in comparison to the baseline.

The baseline position (discussed below) should be used within the context of the reporting calculation. Our AMP7 performance commitment considers the value delivered via a conventional solution meaning that we report 'added natural capital value'. This excludes the value that is already present in the environment and the value which would be delivered if a conventional solution had been selected. This doesn't show the total value delivered but sets NBS in the context of what we would traditionally do. We therefore propose that the natural capital value delivered is compared to the existing environment, as described below. However, where natural capital value changes due to project delivery it is proposed that a similar method to our AMP7 performance commitment is used and the value is captured at project in use, on a lifespan basis. Our current measure uses a 30 year model for lifespan.

Industry standard valuation methodologies are required.

To ensure consistency between companies a standard, independent valuation tool and methodology must be selected or created and agreed. There are a growing number of options available but it is important that a tool is selected which is not specific to either water or wastewater. Our AMP7 performance commitment relies on the use of Ciria's Benefits Estimation Tool (B_{EST}) which is supported by the water industry but has the majority of its application in the wastewater context. We feel that it would be good to build upon the approach we have begun and to work with other companies to gain industry consistency in valuation methods.

NBS may change the way in which totex is spent and accounted for in cost assessments.

As referenced above, integrated solutions may be delivered for the benefit of multiple drivers across price controls. NBS may also change the dominance of capex solutions in favour of operational interventions, to deliver quality drivers. This has been seen for a number of years in Water Resources catchment delivery but is a more recent shift in Wastewater Network Plus. We also seek opportunities to work in partnership with other stakeholders to draw in additional investment for the benefit of customers and the environment. These opportunities are location, driver and sometimes time specific. For example, as part of SCaMP we invested a total of £22 million into improving catchments and farm infrastructure on our owned land. This generated £4 million in grant income for our tenant farmers. There is therefore an opportunity for us to report on the value delivered through partnership working in support of the wider catchment. This will contribute to our wider aspiration to be actively involved in Catchment System Operation (CaSO).

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

However, there is also a risk that historic costs may not be representative of future costs as solution delivery methods change from AMP to AMP based on driver requirements and external stakeholder interest. Partnership working to deliver NBS may also mean that funding is used for third party assets rather than contributing to the company RCV. We are able to share our learning in this area with Ofwat and the rest of the industry to develop a solution which enables PR24 to be cost reflective.

We propose that reporting of natural capital value delivered should apply to all solutions.

In some instances a traditional grey solution may offer the lowest whole-life costs whilst delivering more natural capital benefit, in comparison to NBS. We would propose that PR24 focuses on the lowest whole-life cost benefit with natural capital as a metric, rather than solely focusing on NBS delivery. This would enable a more holistic view to be established which considered all aspects of delivery including embodied carbon, referenced in question 20. Where GHG emissions or removals are components of different models there should be a consistent approach between metrics and ideally each should follow a consistent standard.

In conclusion, we propose that a holistic measure based around natural capital valuation is created to enable consistent reporting of all solutions, including NBS, across the industry. Careful consideration will need to be made to ensure PR24 is cost reflective and that any unintended consequences in RAG and cost assessment are considered as NBS delivery becomes more prevalent. We are happy to support Ofwat with this work and would propose that an industry working group would be a helpful way forward.

- **What work do you think is required to establish relevant baselines?**

A baseline for natural capital valuation is required to understand the relative benefit of NBS.

The format of the baseline for natural capital valuation could take several forms;

- a) A review of the existing natural capital prior to any development;
- b) A review of the natural capital delivered through a conventional solution;
- c) A combination of a) and b).

Option a) is our preferred option, as it shows the full natural capital value of a solution. There are however, some challenges with capturing this data as the natural environment will change year on year, not necessarily with any intervention. For example, trees will mature from the day they were planted, thus sequestering more carbon up to a peak after which this will decrease. It is therefore important to agree an industry standard frequency to update the baseline, using standard tools and methodologies as described above.

We also have the option to capture this baseline on a project specific basis or across the whole area of a water company operation. Our preference is that the baseline should be captured across a whole region as this will more accurately capture the natural capital value delivered. This valuation (measured in £m) would need to be normalised to allow company comparison. This could potentially be by area of operation (including work outside of company boundaries).

United Utilities has experience in creating baselines in options a) to c) and we are willing to share our learning.

As well as our 'Enhancing Natural Capital for Customers' performance commitment which uses option c), we have developed a corporate natural capital account and are working in partnership with other stakeholders to develop a natural capital baseline for our region. This will enable our decision making to

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

include the value of others' assets as well as our own, as we move towards catchment system operation. We had our first meeting with Ofwat's Environment team in mid-August to explore this issue further.

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

Q22. We highlight proposals for household bills reporting in section 4 'Household bills'.

- To what extent do you agree or disagree with these proposals and why?
- What additional information on household bills do you think should be included in the APR?

We agree with the proposal to include in the APR full detail of the calculation of the average household bill, and note that this information is already provided to Ofwat each year as part of the Average Bill Template submission.

We disagree with the proposal to report on household bills by statistical deciles. We are not convinced of the benefits of doing so or how this information could be used to draw any cross-company comparisons. The amount of arrears will be affected by write-off policies which will differ across companies and therefore make comparisons difficult, so it is difficult to understand how this information will be useful to a reader of the APR.

Additionally we would welcome clarity regarding the detail of this proposal, for example:

- Would customers billed for only one month of service be reported in a lower decile than an equivalent customer billed for a full year of service or would allocation to a decile be based on the size of bill related to a full period of service?
- We would welcome a clear definition of what should be considered arrears at any point in time. For example, an unmeasured customer paying monthly could be deemed to be in arrears for the full service period unless the amount billed in advance are adjusted for

In acknowledgement of the relationship between deprivation and debt, we currently segment our gross and net debt arrears by deprivation decile as part of our internal debt management and reporting process. We also segment debt based on groups with similar characteristics as determined by external market intelligence provided by CACI who are experts in customer insight and analysis. This 'Acorn' segmentation of customers takes advantage of a new data environment created by the Public Data Group, Open Data and similar initiatives. The advantage of this approach is that by analysing demographic data, social factors, population and consumer behaviour, it provides precise information and an understanding of different types of people.

Data such as house type, housing tenure, family structure and age, have been the core of all geodemographic segmentations. Many of the inputs are government registers or data sets available as Open Data, through freedom of information, or purchased under licence. CACI has also made extensive use of data from the private sector and where useful information is not readily available CACI have compiled the data themselves.

In using an external segmentation of our customer base at a household level, the segmentation is unbiased and provides key information such as expected range of income, financial obligations such as a mortgage or credit card and uses additional data to evaluate the likelihood that customers in each category will pay their water bill.

Our segmentation of data by deprivation decile is based on information in the public domain and could be used across the industry. To facilitate cross-comparison of data this could be published on a gross and net basis alongside details of debt write-offs, revenue and customer numbers.

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

ADDITIONAL COMMENTS RE: RAGS NOT COVERED IN ABOVE CONSULTATION RESPONSES

Our comments include concerns identified during previous years' reporting processes that we feel have not been reflected in the latest version of the regulatory accounting guidelines and of which we continue to hold these views:

Wholesale/retail cost classifications

In the RAGs, there is some ambiguity surrounding the allocation of costs between the wholesale and retail price controls for:

- customer side leaks; and
- demand-side water efficiency initiatives.

For both these cost types, RAG 2.08 section 2.4 states that "*all expenditure in retail except where there is expenditure to meet wholesale outcomes*". This definition is subjective and, as demonstrated in companies' Table 4F, results in opposing retail and wholesale classifications between companies, with a resultant inconsistency of reporting.

We propose the classification be replaced with "*wholly in wholesale*" justified as follows:

- customer side leaks - all water companies have significant programmes of work within their wholesale business required to reduce leakage by at least 15% in AMP7.
- demand-side water efficiency initiatives - water efficiency measures are designed to meet the goals of our water resources management plan and protect both the short and long term resource requirements of our water resources.

Water cumulo rates

RAG 2.07 currently states that the allocation of costs for cumulo rates should be "*with reference to MEAV*".

Water cumulo rates are principally determined by profit, as opposed to asset values. As such, we propose that rates should be allocated between price controls based on the allocation of return/RCV, and not MEAV. As a result of the introduction of two separate price controls within water, we consider that the RAGs should be modified from 2020-21 to reflect the creation of a separate water resources RCV, and in recognition of the way in which water cumulo rates are calculated when companies are charged.

For the avoidance of doubt, wastewater rates should continue to be allocated based on MEAV, as asset value forms the basis this charge.

Other issues:

Table	Line	Issue
Table 1C Statement of financial position	1C.11	Bank overdraft The 1C.11 line definition for 'Cash & Cash equivalents' states that the overdraft should be reported within 'Trade & other payables' line 1C.13 (although not specifically referenced in 1C.13 itself). However, this is different to IFRS classification and is also inconsistent with the equivalent PR19 table App12 where the overdraft is included within its 'Cash and cash equivalents' line 11. For consistency with IFRS reporting and the PR19 tables, we believe the existing 1C.11 definition should replace the

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

		wording “ <i>Overdraft balances should not be netted off as it should be included separately in ‘Trade & other payables’</i> ” with “ <i>Overdraft balances should be included as a negative figure</i> ”.
Table 1C Statement of financial position	New line	Current deferred income – grants & contributions (G&Cs) and adopted assets Consistent with the presentation of non-current liabilities (lines 1C.26 & 1C.27), within current liabilities we believe two distinct lines for deferred income G&Cs and deferred income adopted assets should be added. This will improve transparency and ensure that total capitalised G&Cs and adopted assets can be reconciled to Table 2E line 37 (carried forward G&Cs).
Table 1D Cash flow	1D.2	Other Income Currently ‘Other income’ line 2 is only be populated with “ <i>the cash impact of other income in line 1A.5</i> ”. This is not aligned with ‘Operating profit’ line 1 which is populated from Table 1A.4 and includes non-cash items. This results in a mismatch of regulatory to statutory adjustments – for example the amortisation of deferred income is removed from ‘Operating profit’ 1D.1 but can’t be reclassified to ‘Other income’ in 1D.2 as it is a non-cash item. We propose the 1D.2 line definition to be amended to remove the reference to cash impact and say “ <i>Other Income. Equal to 1A.5</i> ”.
Table 1D Cash flow	New line	Non-cash items We propose to include an additional line within Section A of the table for ‘Other non-cash items’ so that the working capital and provision lines reflects true movements in working capital and provisions only.
Table 1E Net debt analysis	1E.1	Table 1E Net debt analysis The borrowing valuations used in line 1 represent a ‘notional value’ basis which we believe is more appropriate than book value and is in line with the guidance. In our opinion, the guidance could be more explicit in stating that ‘notional values’ should be used (as has been done in the guidance for ‘Preference share capital’ in line 2) rather than book values and recognising that this could create a reconciling difference to borrowings in Table 1C. We are currently inferring the use of notional values from the guidance which states: “ <i>The following should not be included: 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.</i> ”
Table 4H Financial metrics	4H.10	Credit rating In respect of ‘Credit rating’ (line 10) we believe that the requirement should be to list all solicited long-term ratings for the appointed business (along with the outlook / watch status). We would recommend that only solicited ratings are reported as only solicited rating agencies receive additional non-public information on which to make their assessments and so are likely to be more accurate then unsolicited ratings.

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

Table 4H Financial metrics	4H.17	<p>FFO / Debt</p> <p>We expect 'FFO / Debt' (line 17) is likely to be interpreted by users as mirroring the ratings agencies' calculations. Whilst we recognise that Ofwat has stated that its approach will differ to the credit rating agencies, we still consider it would be more appropriate that this ratio is calculated based on Standard & Poor's methodology to ensure consistency in the calculation of this metric. The key difference is that FFO should be calculated after deducting all underlying interest, not just cash interest as per the 'Funds from operations (FFO)' (line 14) definition. Net debt should also include any reported pension deficit. An additional sentence could be added to the existing line definition so it reads:</p> <p><i><u>"Ratio of FFO to net debt. FFO as per line 12 less interest charge for the accretion of index-linked debt. Net debt as per line 1 plus any reported pension deficit (as per Table 1C, line 24). We acknowledge that our approach to calculating this differs from some of the methodologies applied by the credit rating agencies."</u></i></p>
Table 4I Financial derivatives	4I.23	<p>Line 23 requires 'Other financial derivatives' to be included as one line to reconcile the total (line 24) mark-to-market value through to table 1C. We have three types of derivatives which feed into this line, being electricity swaps, forward dated floating to fixed interest rate swaps and RPI to CPI inflation swaps. In relation to the electricity swaps the nominal value by maturity would have been GWh rather than a financial amount and there is no weighted average interest rate to disclose only a fixed price per GWh. In relation to the forward dated floating to fixed interest rate swaps, the nominal value by maturity assumes the swaps have reached their value date which they have not due to them being forward starting. However, as the RPI to CPI swaps are not forward starting, their nominal value and weighted interest rates have been disclosed within line 23. As such we have disclosed a combined Mark-to-Market value for the three types of swaps in line 23, with the nominal value and interest rates only being relevant to the RPI to CPI swaps. We have provided additional analysis within the narrative regarding this.</p> <p>One potential solution to this issue might be to include another line within section A of the table for "index linked to index linked swaps"), specifically exclude commodity swaps from the table, and require a reconciliation instead to table 1C. Line 23 could then be used purely for forward starting swaps, we could provide a weighted average interest rate, but with these swaps we would remain unable to provide a maturity analysis due to them not having reached their value dates.</p>
Table 4I Financial derivatives	4I.3-4I.5	<p>No definition has been given for the accretion column. We would suggest <i>"Total accretion is equal to the inflation-uplift on the nominal amount of index-linked swap, which will be paid/received on maturity"</i>.</p>
Table 4I Financial derivatives	4I.26	<p>There is no row for index-linked to index-linked swaps (i.e. RPI to CPI swaps), meaning we currently have to include these swaps in 'Other financial derivatives' line 4I.26. We would recommend adding an</p>

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

		additional line to this table (e.g. before 4I.7) 'Index-linked to Index-linked' so this could be separately disclosed.
Table 4I Financial derivatives	4I.11	We have a number of HKD currency interest rate swaps, but there is no row to accommodate these and they need to be input with other currencies in this line, skewing the weighted average interest rates. One solution to this issue might be to allow for more currency lines within the table, i.e. similar to Lines 21-23 for forward currency swaps which include CAD, AUD and HKD.
5B / 8B		A number of tables (e.g. tables 5B & 8B), require costs to be segregated into direct and indirect. Whilst there is some guidance within the RAGs it is open to significant interpretation. Companies are also structured in differing ways which would lead them to treat costs differently between direct and indirect in comparison to others. As such, we do not see the benefit of asking companies to split their costs on this basis. To remove the ambiguity that segregating costs in this ways makes, we would suggest merging the 2 categories so there is no direct/indirect split provided.
RAG4.09 page 135	Network+ - Sewage treatment & disposal boundary points	The text states Please see diagrams in Appendices 4 and 5 for more detail. We think this is referring to Appendix 3 (Sludge Boundaries) in this consultation.
RAG4.09 page 136	Network plus Sludge liquor treatment	Liquor storage tanks are not identified in the assets list unless interpreted as ancillary assets. As this is open to interpretation, we think that this text should be clarified to confirm the position of liquor storage tanks in either the Bioresources or Wastewater Network Plus price control.
RAG4.09 page 136	Sludge transport	The unit cost description is Volume transported (m3). However data collection in table 8A is based on work done calculations with the unit m3*km/year or ttds*km/year. Ofwat needs to confirm what the appropriate unit is and ensure data is collected in the relevant units.
RAG4.09 p129- 138	Unit cost description text	We have a general recommendation that where the units cost data is collected that the table and line reference is included in the unit cost description text to provide clear cross referencing to data tables.

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

Appendix 1 – Example of the change required to all totex tables (shown in red text), to ensure PU recharges for depreciation are presented in a transparent manner and feed into total totex.

Pro forma 2B

Totex analysis for the 12 months ended 31 March 20xx - wholesale

	Water resources	Water Network+	Wastewater Network+	Bioresources	Total	RAG 4 reference
Operating expenditure						
Power	I	I	I	I	C	2B.1
Income treated as negative expenditure	I	I	I	I	C	2B.2
Abstraction charges/ discharge consents	I	I	I	I	C	2B.3
Bulk Supply/Bulk discharge	I	I	I	I	C	2B.4
Enhancement operating expenditure	I	I	I	I	C	2B.5
Growth operating expenditure	I	I	I	I	C	2B.6
Other operating expenditure						
Renewals expensed in year (Infrastructure)	I	I	I	I	C	2B.7
Renewals expensed in year (Non-Infrastructure)	I	I	I	I	C	2B.8
Other operating expenditure excluding renewals	I	I	I	I	C	2B.9
Local authority and Cumulo rates	I	I	I	I	C	2B.10
Total operating expenditure excluding third party services	C	C	C	C	C	2B.11
Third party services	I	I	I	I	C	2B.12
Total operating expenditure	C	C	C	C	C	2B.13
Grants and contributions						
Grants and contributions - operating expenditure	I	I	I	I	C	2B.14
Capital expenditure						
Maintaining the long term capability of the assets - infra	I	I	I	I	C	2B.15
Maintaining the long term capability of the assets - non-infra	I	I	I	I	C	2B.16
Enhancement capital expenditure	I	I	I	I	C	2B.17
Growth capital expenditure	I	I	I	I	C	2B.18
Total gross capital expenditure (excluding third party)	C	C	C	C	C	2B.19
Third party services	I	I	I	I	C	2B.20
Total gross capital expenditure	C	C	C	C	C	2B.21
Grants and contributions						
Grants and contributions - capital expenditure	I	I	I	I	C	2B.22
Net totex	C	C	C	C	C	2B.23
Cash expenditure						
Pension deficit recovery payments	I	I	I	I	C	2B.24
Other cash items	I	I	I	I	C	2B.25
Recharges in respect of 'principal use' assets						
Recharges from other segments	I	I	I	I	C	New line
Recharges to other segments	I	I	I	I	C	New line
Total						
Totex including cash items and principal use recharges	C	C	C	C	C	2B.26

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

Appendix 2 – Supplementary information to Q16 response: Our proposal for Bioresources reporting requirements

In our response to Question 16 we agreed that more data should be collected to support the Bioresources market. We have developed a regulatory reporting proposal which uses a combination of new and existing lines, and which we believe will appropriately support the Bioresources market and ensure consistent treatment of Bioresources across the sector. This Appendix sets out the three tables we would like to propose and our justification for why we believe this data is required.

Introduction

Recent changes in regulatory landscape have made significant moves towards greater competition for Bioresources services, with:

- PR14 separating wholesale and retail;
- the Water Bill creating some of the enabling legislation to support entry into a future Bioresources market;
- the market information platform which provides market info to potential new entrants; and
- PR19 setting a separate Bioresources price control, with “focused” RCV allocation to ensure a level playing field on pricing with new entrants.

The existing Bioresources annual performance reporting has generally worked well and significant progress has been made on ensuring consistent treatment of Bioresources across the sector. Despite this, we propose both changes to existing reporting lines and additional data requirements, in order to provide information to both existing and potential participants to support the Bioresources market.

Should we collect more data to support the Bioresources market?

We believe that reporting should help deliver the following three aims:

4. Provide useful information for potential participants in a Bioresources market – within this, it needs to be recognised that market participants will already have their own knowledge about AD technology and logistics, so the tables should focus on monopoly information that might be unavailable to new entrants, and therefore could be helpful.
5. Manage a level playing field in the sector – it is really important to ensure that cross border flows between Bioresources and Wastewater Network Plus, or external parties (e.g. for energy and liquors), are assessed and valued consistently between companies, else market distortions can arise.
6. To support Ofwat in other duties on regulatory compliance, or to support price control activities (e.g. cost assessment).

Where additional reporting lines are required to deliver the aims above, it is important to recognise the potential cost of collecting data. Therefore the need for any new data that requires additional investment in measurement should:

(a) be subject to a higher standard of “need” to report that data, and

(b) potentially be introduced gradually e.g. by relying on standard engineering calculations first, extrapolation from partial measurement where available, and rising to 100% measurement over time.

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

Our response approach

We have reviewed the lines proposed in tables 8A to 8D and the additional tables issued on 24 July 2020:

- Additional Bioresources table 1 – Energy in Bioresources
- Additional Bioresources table 2 – Renewable energy subsidies
- Additional Bioresources table 3 – Imported sludge liquors treatment
- Additional Bioresources table 4 – Transport data

We have provided comments on individual lines within all these tables under our response to Question 1. Further comments about ‘Additional Bioresources table 3’ and sludge liquor transactions between Wastewater Network Plus and Bioresources are provided in our response to Question 3.

This information contained in this Appendix provides supplementary information to the response to Question 16. We have developed a regulatory reporting proposal which uses a combination of new and existing lines, and which we believe will appropriately support the Bioresources market and ensure consistent treatment of Bioresources across the sector. This remainder of this Appendix sets out the three tables we would like to propose and our justification for why we believe this data is required.

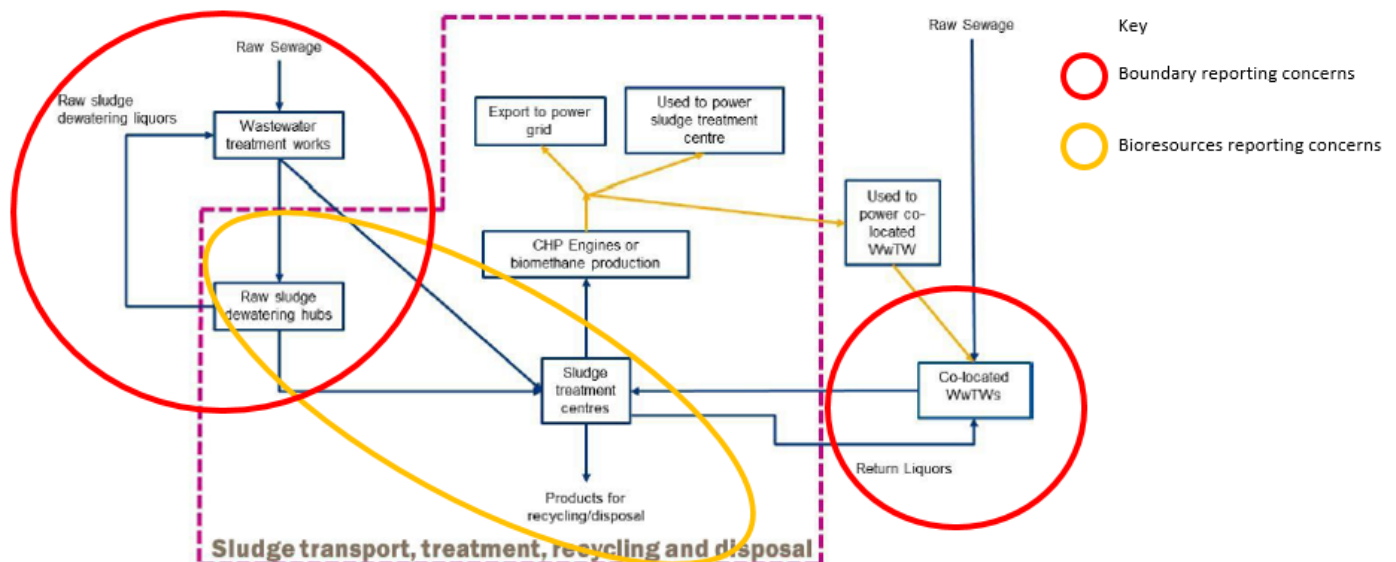
What works well with existing lines

There are several positive aspects of the current reporting that we would like to highlight. We think the sludge produced data has been used successfully to provide the volume component of the volumetric average revenue control underpinned by the need to measure sludge in order to reveal the size of the Bioresources market. The proportion by percentage for sludge treatment type and sludge disposal route can be helpful in revealing Bioresources activities. For example, it provided industry data to assist in the design of our Bioresources AMP7 Recycling Biosolids performance commitment. The units are straightforward and we would support more lines that use this approach to reveal more information, where it is necessary to support development of the Bioresources market.

Opportunities to improve the reporting

We think that there is merit in further reporting lines to improve the understanding of the Bioresources market. Figure 1 below highlights areas on the General Boundary Diagram in RAG 4.09 Appendix 3, where we believe changes to reporting are needed.

General sludge boundary



United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

Figure 1: Reporting concerns mapped to the General sludge boundary

Whilst we agree that there is a requirement for new data for Bioresources, we do not believe that the proposed lines fully address the issues, in order to meet the aims set out above. At a high level, we have two principle areas of concern that the proposed reporting fails to address:

- Reporting at the price control boundary. The proposed reporting will not reveal work done (in sludge thickening, transport or liquor treatment) within the Wastewater Network Plus price control. Unless there is disclosure of activity which has the potential to be assigned to, or move (now and in future) between, either Wastewater Network Plus or Bioresources price controls this will have a distorting effect on the Bioresources market: Companies will have varying proportions of work done in the Wastewater Network Plus and the Bioresources price controls resulting in differences in average costs for Bioresources activities.
- Reporting in Bioresources upstream services. The proposed reporting does not effectively align work done with accounting areas. This will lead to a lack of transparency in transactions between price controls and inhibit fair comparisons between companies

Furthermore, we believe that there are emerging challenges which will need to be addressed by the Bioresources market and recognise this consultation as an opportunity to enhance reporting to address these issues.

Our proposed regulatory reporting

We have taken a wider view of the reporting requirements and proposed three tables, which are a combination of existing and new lines, which we believe would be more appropriate to support the Bioresources market. The tables to follow a logical sequence aligned to the three accounting areas (sludge transport, sludge treatment, sludge disposal). A summary is provided below:

Proposed Table	Data Requirements and Purpose	Lines
8R Sludge Production and transport	Sludge Production: To reveal the sludge produced quantity from appointed business activity.	Existing (8A.1-8A.4) and New
	Sludge Quality: To reveal the sludge quality variables that impact the ability of Bioresources to treat and recover value from sludge.	Existing (8A.19) and New
	Raw Sludge Thickening and Dewatering: To identify the work done in thickening and dewatering sludge activities prior to sludge treatment (stabilisation activities). Revealing what proportion of activity is undertaken in Wastewater Network Plus compared to Bioresources. Revealing what proportion of activity is undertaken at sludge handling sites that requires onward transport compared to the activity at sludge treatment centres which requires no onward transport.	New
	Intersiting Transport: To identify the work done in transport activities. It reveals the transport activity in: <ul style="list-style-type: none"> • Wastewater Network Plus • sludge transport • sludge treatment • and sludge produced which requires no transport 	New
8S Sludge Treatment	Sludge Treatment: To reveal the proportion of work done through various sludge treatment activities	Existing (8D.1-8D.7)

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

	<p>Sludge Liquor Returns: To identify the work done in liquor management activities, liquor treatment plants and liquor returns to enable recharges to be calculated. It will reveal the flow and loads of key determinants that may be used in liquor return cost based on prevailing Mogden charges for the company. It will reveal the work done to remove or recover nutrients from standalone liquor treatment plants.</p>	New
	<p>Energy Recovery and Use: To reveal energy recovery from Bioresources activities and its subsequent use. It identifies the proportion of energy in the forms of electricity, heat and biogas which is used by Wastewater Network Plus, and how much is exported to third parties. It also reveals the different revenue received from energy and energy incentives.</p>	New
8T Sludge Disposal	<p>Sludge Disposal: To identify the total quantity of sludge disposed and the proportions of disposal outlets used.</p>	Existing (8A.6-8A.13) and New
	<p>Sludge Disposal Logistics: To reveal the work done in sludge disposal logistics.</p>	Existing (8A.17-8A.18) and New

Tables 8R, 8S and 8T are proposed to replace Tables 8A, C and D (and the additional Bioresources tables 1-4). No significant changes are proposed to Table 8B (Operating Costs Analysis for Bioresources) and it is proposed that this data would continue to be collected to site alongside Tables 8R, S and T. Any comments on Table 8B are included in our response to Question 1.

The remainder of this document provides more details on the proposed reporting lines, and the benefits that they would generate.

Table 8R Sludge production and transport

Sludge production (8R.1-5)

Existing lines relating to sludge production have been retained and unchanged. We believe it is important to report the quantity of sludge traded into a company, so that the work done by the water sector is revealed as the Bioresources market develops. We think Ofwat should consider this further and therefore we have proposed an additional line, 8R.5. In time this could be extended to include other organic waste imports as well. This will also require consistent and accurate transfer pricing to be in place in order to compare the appointed activities on a level playing field.

Sludge quality (8R.6-9)

Though the quantity of sludge is the basis of the volumetric average revenue control, we believe further consideration on sludge quality is needed going forward. We propose additional lines to reveal the sludge quality variables that impact Bioresources.

The quality of sludge can be significantly impacted by Wastewater Network Plus in terms of debris (grit and screenings) and resources, both energy and nutrient content. This has the potential to increase the cost of sludge treatment and reduce the potential opportunity to generate revenue.

We propose regulatory reporting lines to understand the removal of grit and screenings to reveal the proportion of work done in Wastewater Network Plus compared to Bioresources. This data should be

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

measured already for waste management purposes so this should not be a significant cost to report. It would be important that all companies measure and report this by applying the same methodology.

The existing reporting contains an element of quality relating to chemical phosphorus removal. We believe it is important to extend the data collection on quality to include biological phosphorus removal. This will help to better understand the changing nature of sludge quality as increasing numbers of low and very low phosphorus permit conditions are required over time in Wastewater Network Plus. Biological phosphorus removal will have an impact on work done, costs and revenues in the Bioresources business that will need to be understood.

Though the extent of these quality changes on costs are not yet understood, we believe that data should be collected now to provide the foundational information to enable greater understanding of the future Bioresources market. As in the existing chemical phosphorus line, an engineering calculation would be required, as this is not currently measured. Direct quality measurement on determinants has not been proposed at this stage but the value of direct measurement could be considered in the future, once a measurement approach is determined and the cost impact assessed.

As highlighted in our response to Question 3, to meet low and very low phosphorus permit conditions, may create additional work done in Bioresources i.e. a standalone liquor treatment plant. Under the RAG definitions, a standalone liquor treatment plant would sit within the Bioresources Price Control. However, the need (i.e. the phosphorous consent) is not a requirement of the Bioresources Price Control, it is applied to a Wastewater treatment works (i.e. within the Wastewater Network Plus control). Therefore, we propose that any phosphorous recovery liquor treatment plant, or any other asset designed to remove the phosphorous for a regulatory driver, should sit within the Wastewater Network Plus Price Control as this is where the requirement to meet the lower phosphorous consent sits, even though such an asset would be located downstream of Bioresources.

Raw sludge thickening and dewatering (8R.10-15)

More data is required to reveal the position of the Bioresources price control boundary and understand the work done on sludge which is reported in the Wastewater Network Plus and Bioresources Price controls.

Sludge which is thickened to <10% Dry solids could be either a Wastewater Network Plus activity or a Bioresources activity. This is dependent on the asset base and company logistical decisions as illustrated in figure 2 below. In addition, the logistical decision has a direct impact on sludge transport and the thickening activity impacts sludge liquor returns. Sludge liquors are an important cross border flow and the proportion of thickening work done in Wastewater Network Plus will have a direct and significant bearing on reducing the liquors returned by Bioresources activities. Taken together the cumulative effect could result in a difference in average costs for Bioresources activities, which may have a distorting effect on the Bioresources market, as companies will have varying proportions of work done in the Wastewater Network Plus and the Bioresources price controls. This section considers the thickening activities, there are separate sections to reveal information on Intersiting transport activities and Sludge liquor returns and liquor treatment plants.

This information needs to be revealed to understand the impact of sludge thickening activities on accounting areas. This may inform the level of significance of this potential inconsistency between companies. It may inform a review of the boundary to focus Wastewater Network Plus on sludge production, thickening and dewatering for onward transport, and Bioresources on assets located at sludge treatment centres, which require no onward intersiting transport.

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

We have proposed additional lines to identify the work done in thickening and dewatering sludge activities prior to sludge treatment (stabilisation activities). This reveals what proportion of activity is undertaken in Wastewater Network Plus compared to Bioresources. It also reveals what proportion of activity is undertaken at sludge handling sites that requires onward transport compared to the activity at sludge treatment centres which requires no onward transport. This information is closely linked to and provides context for intersiting transport activities.

Intersiting transport activities (8R.16-21)

The cost for transporting sludge is currently reported in several upstream service areas; sewage treatment, sludge transport and sludge treatment. The figure below is a schematic diagram to show the complex intersiting logistics options and how inconsistent the position of the price control boundary may be. By modifying the logistics disposal location between the inlet of a wastewater treatment works or the start of the sludge processes at the same site, determines which price control the cost is reported in, resulting in differences in average costs, which may distort the Bioresources market.

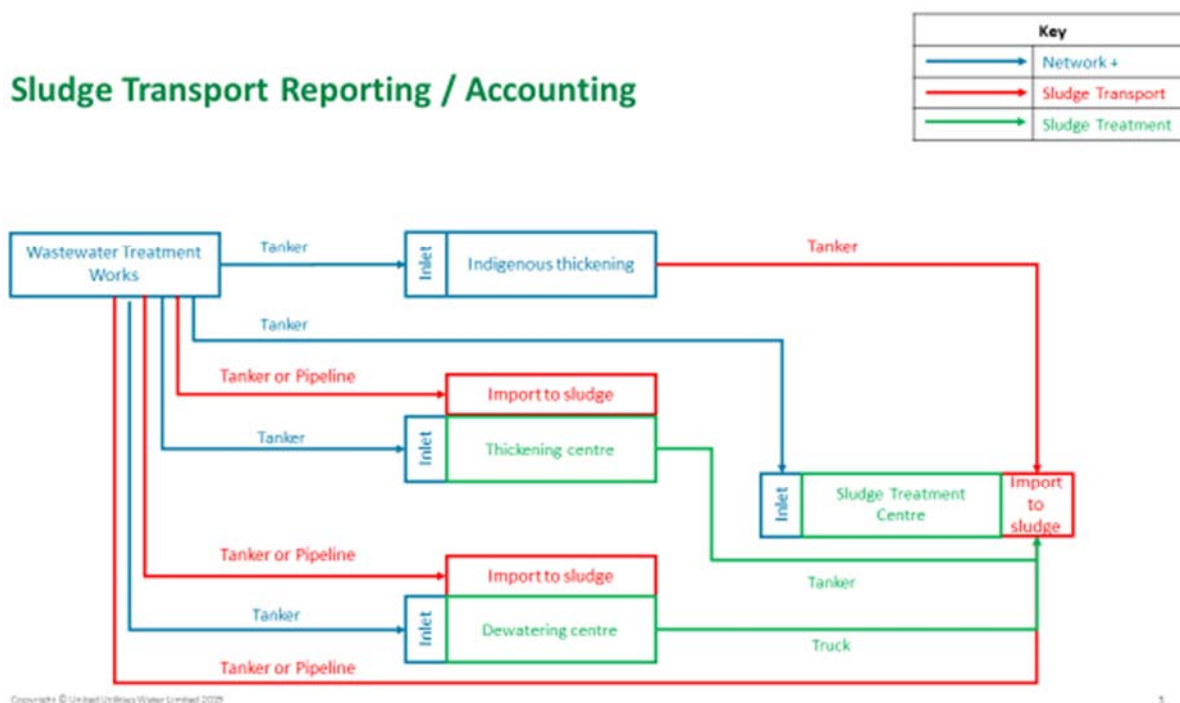


Figure 2: Diagram of transport options and accounting implications.

We think it is essential to reveal the work done by transport in both price controls to enable a true understanding of the Bioresources market and enable fairer comparisons between companies (which are used in price review cost assessment). We have proposed lines 8R.16-8R.21 in Table 8R “Sludge Produced and Transport” to reveal this information aligned to upstream service accounting areas.

There is also a new approach to determining “co-location” in line 8R.19. In the proposed new line definition, co-location is limited to indigenous sludge produced at sludge treatment centres as portrayed in the diagram above, as this sludge requires no onward intersiting transport. We think this is a clearer definition of co-location and aligns to the general boundary diagram.

Sludge pipelines will deliver sludge from a wastewater treatment works to a sludge reception point, and is therefore accounted within sludge transport. As such we have proposed a new approach to work done by pipeline, this is calculated as a percentage of the work done in sludge transport. Line 8R.20. The same approach is used for work done in sludge treatment in Line 8R.21.

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

Table 8S - Sludge Treatment

Sludge treatment (8S.1-7)

Table 8S considers all aspects of sludge treatment. The definition of sludge treatment needs to be clear and consistent to distinguish it from sludge thickening and dewatering. Sludge treatment is the stabilisation process such as anaerobic digestion or liming. The existing lines revealing the proportions of work done through various sludge treatment types are retained.

Sludge liquor returns and liquor treatment plants (8S.8-13)

We have set out our views on the additional sludge liquor reporting lines in response to Question 3. We agree that additional lines are required to make the sludge liquor transactions between Network+ and Bioresources sufficiently transparent. We recognise the intention set out during PR19, which envisaged engagement on the pricing of sludge liquor treatment (e.g. using a transfer price based on company trade effluent prices, which utilise the Mogden formula). The proposed lines in Table 8S align to using UU's Mogden charge as the basis for recharge.

As noted in our response to Question 3, we need to step into sludge liquor recharges carefully. We urge Ofwat to act cautiously, perhaps via implementation of a phased approach over AMP7 to the implementation of liquor recharges. This would enable ongoing review of the methodology, and to assess the emerging impact of those recharges on the both the Bioresources market and company approaches to managing liquor returns.

More data is required to reveal the position of the Bioresources price control boundary and understand the work done on sludge liquors which is reported in the Wastewater Network Plus and Bioresources Price controls. Sludge liquors are an important cross border flow and the proportion of thickening work done in Wastewater Network Plus will have a direct and significant bearing on reducing the liquors returned by Bioresources activities. This could have a distorting effect on the Bioresources market, as companies will have varying proportions of work done in the Wastewater Network Plus and the Bioresources price controls. We think it is essential to reveal the work done in both price controls to enable fairer comparisons between companies (which are used in price review cost assessment).

We have included work done lines for liquor treatment plants 8S.8-10. We believe it is important to reveal the extent of liquors treated by Bioresources and to be clear on what determinants are being treated. The RAG is not specific as to what liquor plants are removing and it is possible that liquor treatment plants are addressing determinants that are not included in the modified Mogden charging mechanism. Though liquor treatment plants may have been in place for some time, we can foresee an emerging need for new plants to manage Phosphorus recovery based on tightening Phosphorus permit conditions on final effluent in Wastewater Network Plus (refer to Question 3).

Energy recovery and use (8S.14-18)

We agree with the need to disclose more information relating to energy generation and use, as well as the value this creates. As the main revenue opportunity for Bioresources at present, accounting for the costs and benefits generated in a consistent and comparable way is essential. It is particularly important to have consistency in reporting the recharging between Wastewater Network Plus and Bioresources price controls.

Energy is recovered from sludge as biogas, which may subsequently be used in Combined heat and power engines to generate heat and electricity, or cleaned up to create biomethane and exported to the gas grid. The value of the energy is significantly influenced by Government incentives. Incentive rates relate to the opportunity available at the time of installation and are usually fixed for many years. Though essential to establish the business case for investment, this could present a barrier to the market as

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

installations built now will receive a different level of support through incentives compared to existing plants. Therefore we believe it is important to specifically reveal the value of incentives.

It is also important for Ofwat to note that there is inconsistency in incentive rates between the Water and Waste anaerobic digestion sectors. Waste operators benefit from up to four times the incentive rate for electricity generated, than the rate available to the Water sector. This inconsistency between sectors creates unnecessary complexity and disincentivises waste operators to treat sewage sludge, which is acting against the development of the Bioresources market. We recommend Ofwat considers this matter further, separate to this consultation.

Energy reporting could be very detailed. We believe it is important to focus on the essential aspects aligned to the reporting aims and balance the amount of information reported. We propose lines 8S.14-18 to collect information on recovered electricity, heat and biogas in MWh to capture all revenue opportunities. The reporting identifies the proportion of energy used in Bioresources, Wastewater Network Plus or by a third party.

The financial value for those proportions is reported. We propose that revenue from third parties is based on export revenue; the sale price excluding incentives. The revenue from Wastewater Network Plus is based on the average grid price for the Wastewater Network Plus site, for electricity, or the cost of fuel (for heating) being offset. Information on the cost of energy generated and used within the Bioresources business is not recharged so we are not proposing to collect this.

As energy reporting lines are additional requirements and it is important to recognise the potential cost of collecting data. Flows of energy between Bioresources and Wastewater Network Plus are not measured, but rather calculated based on netting off energy used or offset. We are rolling out some data measurement but full measurement could require significant investment and will take several years to develop. We want to emphasise the importance that any definitions need to be unambiguous and consistently applied by all companies. Without this clarity and consistency there is a risk of lack of comparability across companies, which will create distortions in the Bioresources market.

Table 8T - Sludge Disposal

Sludge disposal type

The existing lines revealing the quantity of sludge disposal and the proportions of sludge disposed using various routes are retained in lines 8T.1-10. This includes one additional line to separate out restoration sites which accept raw from partly treated sludge, as these can be separately permitted activities. This also provides context for sludge disposal logistics.

Sludge disposal logistics

Total measure of work done lines are retained 8T.11-12. We have proposed additional lines 8T.13-18 to reveal more information about work done in sludge disposal transport, relating the work done with the disposal route. We think that this provides helpful additional information for the market.

However, work done alone does not necessarily capture different levels of opportunity for disposing of sludge between regions. In some cases companies might be willing to transport sludge further if someone is willing to buy it i.e. in regions of high demand (such as the east and south) or reduce the work done by incentivising farmers to receive sludge i.e. in regions of low demand such as the Northwest. In such circumstances, work done alone does not capture additional costs incurred (or benefits gained) that might offset that work done. Therefore we propose two lines (8T.19-20) to reveal the income generated from sludge recycled to agriculture, or other outlets.

United Utilities response to the Ofwat consultation

Annual Performance Report Consultation 2020-21

In conclusion, we do believe that more data should be collected to support the Bioresources market. We have developed a proposal which uses a combination of new and existing lines, and which we believe will appropriately support the Bioresources market and ensure consistent treatment of Bioresources across the sector. We would welcome the opportunity to continue working with Ofwat and the sector through a sludge working group to progress in-depth on reporting requirements to support the Bioresources market.

Proposal 8R

Non-financial data - sludge produced and transported for the 12 months ended 31st March 20xx - bioresources

Sludge Production	Units	Input
-------------------	-------	-------

RAG 4.09 Reference	Proposed Reference
--------------------	--------------------

Proposed Line Definition

The purpose of this section is to reveal the sludge produced quantity from appointed business activity

Total sewage sludge produced, treated by incumbents	ttds/ year	I
Total sewage sludge produced, treated by 3 rd party sludge service provider	ttds/ year	I
Total sewage sludge produced	ttds/ year	C
Total sewage sludge produced from non-appointed liquid waste treatment	ttds/ year	I
Total quantity of untreated sewage sludge produced by a third party, which is treated or remains untreated prior to disposal.	ttds/ year	I

8A.1	8R.1
8A.2	8R.2
8A.3	8R.3
8A.4	8R.4
n/a	8R.5

<p>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 3rd party service providers should be reported in 8R.2.</p>
<p>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 3rd party service providers) should be excluded; instead it should be reported in 8R.1.</p>
<p>To be entered as the sum of 8R1 and 8R.2.</p>
<p>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 8R.3. Crossborder imports should be excluded.</p>
<p>This is a measure of all the untreated sewage sludge (primary, secondary, tertiary) produced by a third party in the report year which is either treated or remains untreated prior to disposal (i.e. sludge traded in).</p>

Sludge Quality	Units	Input
----------------	-------	-------

To reveal the sludge quality variables that impact the ability of Bioresources to treat and recover value from sludge.

Chemical P sludge as % of sludge produced at STWs	%	I
Biological P sludge as % of sludge produced at STWs	%	I
Grit and screenings produced by Wastewater Network plus activities	tonnes	I
Grit and screenings produced by Bioresources activities	tonnes	I

8A.19	8R.6
n/a	8R.7
n/a	8R.8
n/a	8R.9

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 8R.3)
The total quantity of sludge produced at wastewater treatment works which use biological treatment for phosphorus removal expressed as a percentage of total sludge produced at all in area sewage treatment works (reported in 8R.3)
The total annual quantity of grit and screenings removed by Wastewater Network Plus activities. This is reported in wet tonnes.
The total annual quantity of grit and screenings removed by Bioresources activities. This is reported in wet tonnes.

Raw sludge thickening and dewatering	Units	Input
--------------------------------------	-------	-------

The purpose of this section is to identify the work done in thickening and dewatering sludge activities prior to sludge treatment (stabilisation activities). Revealing what proportion of activity is undertaken in Wastewater Network plus compared to Bioresources. Revealing what proportion of activity is undertaken at sludge handling sites that requires onward transport compared to the activity at sludge treatment centres which requires no onward transport. (total should equal 100%)

Wastewater Network plus sludge thickening activity (only indigenous sludge to <10%DS)	%	I
Bioresources sludge thickening (to <10%DS) at a dedicated sludge thickening centre, prior to onward transport to a sludge treatment centre	%	I
Bioresources sludge dewatering (to >10%DS) at a dedicated sludge dewatering centre, prior to onward transport to a sludge treatment centre	%	I
Bioresources sludge thickening (to <10%DS) at a sludge treatment centre	%	I

n/a	8R.10
n/a	8R.11
n/a	8R.12
n/a	8R.13

This line reports the work done in sludge thickening in the Network Plus price control prior to crossing the boundary to Bioresources. This is the proportion of indigenous sludge only which is thickened to less than 10%DS. Reporting includes thickening processes such as SAS thickening and gravity belt thickeners. It excludes passive thickening such as sludge holding tank decanting by gravity. The calculation of percentage uses TDS, with the denominator being line 8R.3 total sludge produced.
This line reports the work done in sludge thickening in the Bioresources price control at dedicated sludge thickening centres. This is the proportion of all (indigenous and imported) sludge which is thickened to less than 10%DS prior to onward transport to a sludge treatment centre. Reporting includes thickening processes such as SAS thickening and gravity belt thickeners. It excludes passive thickening such as sludge holding tank decanting by gravity. The calculation of percentage uses TDS, with the denominator being line 8R.3 total sludge produced.
This line reports the work done in sludge dewatering in the Bioresources price control at dedicated sludge dewatering centres. This is the proportion of all (indigenous and imported) sludge which is thickened to greater than 10%DS prior to onward transport to a sludge treatment centre. The calculation of percentage uses TDS, with the denominator being line 8R.3 total sludge produced.
This line reports the work done in sludge thickening in the Bioresources price control at sludge treatment centres (ie co-located with sludge treatment activity such as digestion or lime treatment). This is the proportion of all (indigenous and imported) sludge which is thickened to less than 10%DS. Reporting includes thickening processes such as SAS thickening and gravity belt thickeners. It excludes passive thickening such as sludge holding tank decanting by gravity. The calculation of percentage uses TDS, with the denominator being line 8R.3 total sludge produced.

Bioresources sludge dewatering (to >10%DS) at a sludge treatment centre	%	I
Bioresources sludge at a sludge treatment centre which is not thickened or dewatered prior to sludge treatment	%	I

n/a	8R.14
n/a	8R.15

This line reports the work done in sludge dewatering in the Bioresources price control at sludge treatment centres (ie co-located with sludge treatment activity such as digestion or lime treatment). This is the proportion of all (indigenous and imported) sludge which is thickened to greater than 10%DS. The calculation of percentage uses TDS, with the denominator being line 8R.3 total sludge produced.

This line reports the work done where no sludge thickening or dewatering activity takes place at a sludge treatment centre prior to sludge treatment activity. This is the proportion of all (indigenous and imported) sludge which is not subject to any thickened or dewatering process other than decanting by gravity prior to sludge treatment activity such as digestion or liming. The calculation of percentage uses TDS, with the denominator being line 8R.3 total sludge produced.

Intersiting Transport	Units	Input
-----------------------	-------	-------

The purpose of this section is to identify the work done in transport activities. It reveals the transport activity: in Wastewater Network Plus; in sludge transport; in sludge treatment and sludge produced which requires no transport.

Total distance/work done (units) reported in Wastewater Network Plus	ttds*km/year	I
Total distance/work done (units) reported in sludge transport	ttds*km/year	I
Total distance/work done (units) reported in sludge treatment	ttds*km/year	I
The percentage of sludge produced which requires no sludge transport by road or pipeline prior to sludge treatment.	%	I
Percentage of total work done in sludge transport by sludge pipeline	%	I
Percentage of total work done in sludge treatment by sludge pipeline	%	I

n/a	8R.16
n/a	8R.17
n/a	8R.18
n/a	8R.19
n/a	8R.20
n/a	8R.21

This is the total distance/work done (units) for the transport of sludge from a wastewater treatment works to the inlet of a wastewater treatment works. The cost for this activity is within the Wastewater Network Plus price control.

This is the total distance/work done (units) for the transport of sludge from a wastewater treatment works to the sludge reception at a sludge thickening, dewatering or sludge treatment centre. The cost for this activity is within Bioresources Transport accounting.

This is the total distance/work done (units) for the transport of sludge from a sludge thickening or dewatering site to a sludge treatment centre. The cost for this activity is within Bioresources Sludge Treatment accounting.

This is the percentage of sludge produced which requires no sludge transport by road or pipeline prior to sludge treatment. (The calculation uses TDS, with line 8R.3 as the denominator) i.e. it is indigenous sludge produced and treated within the curtilage of a single wastewater treatment works and sludge treatment centre prior to sludge disposal. (This specifically excludes sludge produced at thickening and dewatering sites that require onward transport for sludge treatment).

This is the percentage of work done in sludge transport conducted by sludge pipeline. (the calculation uses line 8R.17 as the denominator)

This is the percentage of work done in sludge treatment conducted by sludge pipeline. (the calculation uses line 8R.18 as the denominator)

Proposal 8S

Non-financial data - sludge treatment for the 12 months ended 31st March 20xx - bioresources

Sludge Treatment	Units	Input
------------------	-------	-------

The purpose of this section is to reveal the proportion of work done through various sludge treatment activities

% Sludge - untreated	%	l
% Sludge treatment process - raw sludge liming	%	l
% Sludge treatment process - conventional AD	%	l
% Sludge treatment process - advanced AD	%	l
% Sludge treatment process - incineration of raw sludge	%	l
% Sludge treatment process - other (specify)	%	l
% Sludge treatment process - Total	%	l

Sludge liquor returns and utilisation of liquor treatment plants	Flow	Settled COD
	Ml/d	tonnes

To identify the work done in liquor management activities, liquor treatment plants and liquor returns to enable recharges to be calculated. It will reveal the loads of key determinands that may be used in liquor return cost calculations. It will reveal the work done to remove or recover nutrients from standalone liquor

Load of raw sludge liquors from Wastewater Network Plus thickening activity	l	l
Load of raw sludge liquors from Bioresources activities	l	l
Load of digested sludge liquors from Sludge Treatment Centres	l	l

	Units	Input
--	-------	-------

Recharge to Bioresources by Wastewater Network Plus for costs of handling and treating bioresources liquors	£m	l
Ammonia reduction through stand alone liquor treatment plants	tonnes	l
Phosphorus product recovery (tonnes)	tonnes	l

Energy generated by Bioresources	Electricity	Heat	Biogas	Electricity	Heat	Biogas
	MWh	MWh	MWh	£m	£m	£m

The purpose of these lines is to reveal energy recovery from Bioresources activities and its use. It reveals how much energy is used by bioresources, how much is used by Wastewater Network Plus, and how much is exported to third parties.

Energy generated by and used in bioresources control	l	l	l			
Energy generated by bioresources and used in network plus control	l	l	l	l	l	l
Energy generated by bioresources and exported to the grid or third party	l	l	l	l	l	l
Energy bought from grid and used in bioresources control	l	l	l	l	l	l
Total Income claimed from renewable energy subsidies				l	l	l

RAG 4.09 Reference	Proposed Reference
--------------------	--------------------

Proposed Line Definition

8D.1	8S.1
8D.2	8S.2
8D.3	8S.3
8D.4	8S.4
8D.5	8S.5
8D.6	8S.6
8D.7	8S.7

Percentage of sludge produced which is untreated prior to disposal
Percentage of sludge produced which is untreated other than by liming
Percentage of sludge produced which is treated by conventional AD (with or without liming)
Percentage of sludge produced which is treated by advanced AD (with or without liming). (THP, EH, two-stage + PAS and APD)
Percentage of sludge produced which is untreated other than by incineration
Percentage of sludge produced by other treatment type(s) (to be specified)
Calculated as the sum of 8D.1 to 8D.6 The totals for the incumbent and 3rd party service provider columns should sum to 100%

n/a	8S.8
n/a	8S.9
n/a	8S.10

The liquor load from Wastewater Network Plus sludge thickening activity reported in line 8R.10. This is a calculation using agreed industry engineering standards for consistency.
The liquor load from Bioresources raw sludge thickening and dewatering activity reported in lines 8R.11, 8R.12, 8R.13, 8R.14. This is a calculation using agreed industry engineering standards for consistency.
The liquor load from Bioresources digestion activity. The calculation is based on the sludge treatment type lines 8D.3 and 8D.4. The calculation assumes all digested sludge is dewatered to produce a sludge cake and generate digested sludge liquors using agreed industry engineering standards for consistency.

8C.8	8S.11
n/a	8S.12
n/a	8S.13

Recharge to Bioresources by Wastewater Network Plus for costs of handling and treating bioresources liquors. Consistent recharging methodology based on the Mogden formula to value imported sludge liquors consistently and avoid distortions.
The total quantity of ammonia removed from all sludge liquors through bioresources liquor treatment plants. The quantity is reported in tonnes.
The total quantity of phosphorus product recovered from all sludge liquors through bioresources liquor treatment plants. The quantity is reported in tonnes.

8C.1	8S.14
8C.2	8S.15
8C.3	8S.16
8C.4	8S.17
n/a	8S.18

Total energy generated from sludge produced (8R.3) and used in Bioresources control. Revenue received excludes incentives.
Total energy generated from sludge produced (8R.3) and used in network plus control. Revenue received excludes incentives.
Total energy generated from sludge produced (8R.3) and exported to grid or third party. Revenue received excludes incentives.
Total energy bought from grid (or third party) and used in bioresources control.
Total revenue of energy incentives from sludge produced (line 8R.3) e.g. Renewable Obligation Certificates (ROC), feed in Tariff (FIT)

Proposal 8T

Non-financial data - sludge disposal for the 12 months ended 31st March 20xx - bioresources

Sludge Disposal Type	Units	Input
----------------------	-------	-------

RAG 4.09 Reference	Proposed Reference
--------------------	--------------------

Proposed Line Definition

To identify the total quantity of sludge disposed and the proportions of disposal outlets used.

Total sewage sludge disposed by incumbents	ttds/ year	I
Total sewage sludge disposed by 3rd party sludge service provider	ttds/ year	I
Total sewage sludge disposed	ttds/ year	C
% Sludge disposal route - landfill, raw	%	I
% Sludge disposal route - landfill, partly treated	%	I
% Sludge disposal route - land restoration/ reclamation, raw	%	I
% Sludge disposal route - land restoration/ reclamation, partly treated	%	I
% Sludge disposal route - sludge recycled to farmland	%	I
% Sludge disposal route - other (specify)	%	I
% Sludge disposal route - Total	%	I

8A.6	8T.1
8A.7	8T.2
8A.8	8T.3
8D.8	8T.4
8D.9	8T.5
n/a	8T.6
n/a	8T.7
8D.11	8T.8
8D.12	8T.9
8D.13	8T.10

<p>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 3rd 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 3rd party service providers should be reported in 8T.2</p>
<p>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 8T.1</p>
To be entered as the sum of 8T.1 and 8T.2
Percentage of (un-incinerated) sludge by disposal route - landfill, raw
Percentage of (un-incinerated) sludge by disposal route - landfill, partly treated
Percentage of (un-incinerated) sludge by disposal route - land restoration / reclamation, raw
Percentage of (un-incinerated) sludge by disposal route - land restoration / reclamation, partly treated
Percentage of (un-incinerated) sludge by disposal route - recycled to farmland
Percentage of (un-incinerated) sludge by disposal route - other (specify)
Calculated as the sum of lines 8T.4 to 8T.9 The totals for the incumbent and 3rd party service provider columns should sum to 100%

Sludge Disposal Logistics	Units	Input
---------------------------	-------	-------

To reveal the work done in sludge disposal logistics.

Total measure of 'work' done in sludge disposal operations (all forms of transportation)	ttds*km/year	l	8A.17	8T.11	Total work done in sludge disposal operations carried out by any vehicle 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*ttds1)+(km2*ttds2)+.....(kmN*ttdsN)
Total measure of 'work' done by tanker in sludge disposal operations (by volume transported)	m3*km/yr	l	8A.18	8T.12	Total work done in sludge disposal operations carried out by road tanker during the report year measured as the product of sludge volume (in m3) 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*m31)+(km2*m32)+.....(kmN*m3N)
Average distance to sludge disposal outlet - landfill, raw	ttds*km/year	l	n/a	8T.13	This is the weighted average distance to dispose of raw sludge from export centres (all thickening, dewatering or sludge treatment centres) to the landfill outlets using actual [estimated?] distance travelled. [Weighted average calculations is linked to line 8T.4]
Average distance to sludge disposal outlet - landfill, partly treated	ttds*km/year	l	n/a	8T.14	This is the weighted average distance to dispose of partly treated sludge from export centres (all thickening, dewatering or sludge treatment centres) to the landfill outlets using actual distance travelled. [Weighted average calculations is linked to line 8T.5]
Average distance to sludge disposal outlet - land restoration/ reclamation, raw	ttds*km/year	l	n/a	8T.15	This is the weighted average distance to dispose of sludge from export centres (all thickening, dewatering or sludge treatment centres) to the restoration outlets using actual distance travelled. [Weighted average calculations is linked to line 8T.6]
Average distance to sludge disposal outlet - land restoration/ reclamation, partly treated	ttds*km/year	l	n/a	8T.16	This is the weighted average distance to dispose of sludge from export centres (all thickening, dewatering or sludge treatment centres) to the restoration outlets using actual distance travelled. [Weighted average calculations is linked to line 8T.7]
Average distance to sludge disposal outlet - sludge recycled to farmland	ttds*km/year	l	n/a	8T.17	This is the weighted average distance to dispose of sludge from export centres (sludge treatment centres) to the agricultural outlets using actual distance travelled. [Weighted average calculations is linked to line 8T.8]
Average distance to sludge disposal outlet - other (specify)	ttds*km/year	l	n/a	8T.18	This is the weighted average distance to dispose of sludge from export centres (all thickening, dewatering or sludge treatment centres) to the other specified outlets using actual distance travelled. [Weighted average calculations is linked to line 8T.9]
Income from sludge recycled to agriculture	£m	l	n/a	8T.19	This is the total net income from the use of treated sludge to agriculture. This includes income from sales, as well as costs for financial incentives paid, to farmers to receive sludge.
Income from sludge recycled to other outlets	£m	l	n/a	8T.20	This is the total income from the sale of treated sludge to any other outlet.