



ANNEX I

Efficiency of Gate 2
Spend



Minworth SRO

Annex I1: Efficiency of Gate 2 Spend

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1. Introduction

This document provides a technical annex to the Gate 2 Report for the Minworth SRO project, providing the supporting information, data and analysis to confirm the efficiency of spend to RAPID Gate 2 as summarised in Chapter 11.

The overall structure of this Annex is as follows:

- Section 2 provides the breakdown of the actual and forecast spend to Gate 2. Actual costs are provided to the end of July 2022 and forecast costs from 1st August 2022 to 14th November 2022. A reconciliation of costs will be undertaken post Gate 2 submission. In order to meet the RAPID submission deadlines, actual costs to 14th November 2022 were not available at time of final publication.
- Section 3 documents the procurement approach taken for the support services required for Gate 2, including shared procurement between integrated SROs, and how this has driven efficiency into the programme, change control & delivery to budget.

All costs throughout this annex are deflated to FY2017/18 prices.

2. Gate 2 Cost Breakdown

2.1. Introduction

The Gate 2 cost breakdown is presented, initially, compared to the RAPID Gate 2 allowance as a whole and then broken down for comparison across the technical workstreams required for the implementation of Gate 2. The costs are made up of internal staff costs for both Severn Trent Water (STW) and Affinity Water (AfW) which are focused upon SRO leadership, technical integration and integrated co-ordination, and external consultancy costs for technical and other support services that were required for successful Gate 2 delivery.

2.2. RAPID Gate 2 Allowance

The cost allowances to produce the Gate 2 submission were provided in Ofwat's Final Determination documentation¹. The allowances for the Minworth SRO are shown in **Error! Reference source not found.** below, with costs split between STW and AfW. The RAPID Gate 2 allowance is £1.35M. RAPID approved the use of the SRO's Gate 1 underspend (£457k) as part of the Gate 2 budget (email January 2022). The total Gate 2 budget is therefore £1.8M.

¹ [PR19-final-determinations-Strategic-regional-water-resource-solutions-appendix.pdf \(ofwat.gov.uk\)](#)

Table 1 - RAPID cost allowances for Minworth SRO (excluding Gate 1 underspend)

Stage	Severn Trent Water Allowance (£M)(FY2017/18 base price)	Affinity Water Allowance (£M)(FY2017/18 base price)	Total (£M) (FY2017/18 base price)	% Split
Gate 1	0.60	0.30	0.90	10%
Gate 2	0.90	0.45	1.35	15%
Gate 3	2.10	1.05	3.15	35%
Gate 4	2.40	1.20	3.60	40%
TOTAL	6.00	3.00	9.00	100%

2.3. Gate 2: Actual and Forecast Costs

The actual costs are recorded to 31st July 2022, based upon actual invoices / costs received on the project, plus forecasted costs to the Gate 2 submission, 14th November 2022.

For deflation values from our current costs & forecasts, we have used Table 2 below, which has been formulated via Severn Trent Water financial services.

Table 2 - RAPID deflation CPHI index to 2017-18 prices

2017/18	CPI-H	Def/Fac	2017/18	Benchmark
104.2	109.1	0.955	2020/21	April 2020 - March 2021
	113.1	0.921	2021/22	April 2021 - March 2022
	120.4	0.865	2022/23	April 2022 - March 2023
	122.5	0.851	2023/24	April 2023 - March 2024
	124	0.840	2024/25	April 2024 - March 2025

2.4. Expenditure Efficiency

The anticipated Gate 2 out-turn cost will be £1,476,275. We have delivered a saving when comparing the deflated forecast cost against the total Gate 2 budget of £1,807,000.

Whilst we have carried out the Gate 2 activities and positioned Minworth SRO with effective resources and information, we have delivered against the Gate 2 budget with a saving of 18% creating an SRO saving against the Gate 2 budget of £330,725. As with Gate 1, this saving will be brought forward into Gate 3; this will create additional opportunity to validate the Minworth SRO's by way of bolstering environmental surveys, environmental and ecological effects and positively gaining data and information to support the EIA.

2.5. Gate 2: Cost breakdown by technical workstream

The actual costs are recorded against each of the main the technical workstreams. The details of why each workstream was required and the alignment of each of the Gate 2 requirements are outlined in Section 3. Table 3 provides the breakdown of the actual costs, showing the percentage of expenditure per Annex against the RAPID Final Determination allowance.

Table 3 - Gate 2 cost breakdown by workstream²

Category	Activity	Expenditure Activity (£)	% of Total Expenditure Activity	Expenditure Category (£)	% of Total Expenditure Category	Description
Programme and Project Management	PM & PMO	154,821	10.5%	183,395	12.4%	Project manager and project management office
	Assurance	28,574	1.9%			3rd line assurance and copywriting
Feasibility Assessment and Concept Design	Engineering	431,243	29.2%	481,789	32.6%	Engineering CDR
	Flow Reduction	16,279	1.1%			Flow reduction investigations
	Modelling	34,267	2.3%			Modelling
Option benefits, development and appraisal	Water resource	-	0.0%	-	0.0%	(included in feasibility and concept design)
	Non-water resource benefits	-	0.0%			(included in feasibility and concept design)
	Carbon, wider best value and option appraisal	-	0.0%			(included in feasibility and concept design)
Environmental Assessment	Ecological Monitoring	27,279	1.8%	381,409	25.8%	Ecological monitoring and reporting
	Environmental Assessments	120,629	8.2%			SEA, HRA, BNG, NC, EAR
	Environmental Impact Assessment	66,006	4.5%			EIA
	National Assessment Unit (NAU) & Environment Agency (EA) Area costs	133,406	9.0%			3rd party cost
	Natural England	34,088	2.3%			3rd party cost
Data collection, sampling and pilot trials	Targeted baseline desktop studies	-	0.0%	249,470	16.9%	(included in feasibility and concept design)
	Water Quality Monitoring	222,264	15.1%			Water quality monitoring
Procurement Strategy	2D bathymetric survey	27,206	1.8%	69,474	4.7%	Bathymetric survey
	Procurement strategy	69,474	4.7%			Procurement advice
Planning Strategy	Minworth Storage Options	1,364	0.1%	55,148	3.7%	Croft Quarry - High-Level Assessment
	Land and planning	53,784	3.6%			Land referencing, field surveys, permitting plans
Stakeholder engagement	Customer Engagement	42,806	2.9%	42,806	2.9%	Customer research, benefits & impact
Legal	Legal advice and collaborative agreement	12,784	0.9%	12,784	0.9%	Legal activities related to the SRO
Other	Other	-	0.0%	-	0.0%	n/a
Total		1,476,275	100%	1,476,275	100%	
Gate 2 Allowance	OFWAT PR19 final determination for gate 2	1,350,000		1,350,000		
Transfer from gate 1	Gate 1 underspend approved for gate 2 use	457,000		457,000		RAPID approval January 2022
Revised gate 2 allowance		1,807,000		1,807,000		
Gate under / overspend		330,725		330,725		

² Dual leadership costs (shown in Table 4) are apportioned across workstreams according to the Expenditure Activity percentage

3. Efficient Delivery of Gate 2 Activities

3.1. Introduction

This section provides commentary on how we have driven efficiency into the Gate 2 submission. This efficiency includes:

- Alignment between the RAPID Gate 2 requirements and the work packages initiated to ensure all spend is relevant to SRO delivery of the Gate 2 submission;
- Agreement of a standardised methodologies for selected work packages across SROs via the All Company Working Group (ACWG). The Minworth SRO PMB has STW and AfW membership and attends the weekly ACWG meetings;
- Application of competitive procurement approaches, wherever possible;
- Procurement across SROs, for aligned work packages;
- Robust change control processes and delivery to budget
- Considering efficiency in terms of both scope and procurement.

In delivering this submission we have adhered to the criteria provided by RAPID for efficient expenditure, namely that activities should be relevant, timely, complete and of high quality and that this is backed by benchmarking and assurance.

Opportunities have been identified to leverage efficiencies in the following ways:

- Undertake work internally where we have the appropriate skills and experience. Both partners have small teams working fulltime across the SROs we are partners in, with support from other specialist internal and external staff as required. Internal recharging to the scheme has been proactively monitored and robustly challenged to ensure that the SRO has not paid business as usual costs. Examples of this include WRMP modelling where we are utilising the existing Severn Trent model of the River Tame and Trent. Note that this SRO is only funding additional work such as scenario runs on the Tame and Trent to model the downstream impact of diverting Minworth treated wastewater.
- Utilise established supplier frameworks from both of the partners where appropriate, which have previously been competitively tendered to establish pre-agreed rates. This approach allows access to specialist advice from professionals who are already familiar with our existing assets, something which is of particular value at Minworth where we are looking to add to an existing asset. Opportunities have been sought to competitively tender work within frameworks where time allows. Of the 65% of Gate 2 costs which could be competitively tendered (Tables 4 and 6), 51% were let specifically for Gate 2 via company frameworks, 6% were gate 2 work package extensions through company frameworks, 3% were direct awards and 5% were undertaken by internal company resources.
- It was not possible to competitively tender all work elements. For example, work undertaken by the two partners and the costs of regulators such as the EA/NAU and Natural England could not be tendered. 35% of the Gate 2 costs could not be competitively tendered.
- We have delivered economies of scale by partnering with other organisations to procure packages of work with common scope and objectives. Examples include partnering with regional groups for the WRSE customer preference surveys. We have also actively engaged with the All Company Working Group (ACWG) to partially fund consistency projects.
- As an SRO we have reviewed existing data sources and undertaken gap analysis to ensure we have not duplicated existing research.

Table 4: Gate 2 Cost breakdown by workstream with procurement route

Category	Activity	Expenditure Activity (17/18 FY £)	% of Expenditure Activity	Procurement Route and Comments
Programme and Project Management	PM	45,640	3.1%	Direct award
	PM	49,583	3.4%	STW internal resource
	PMO	19,815	1.3%	STW internal resource
	Assurance	18,635	1.3%	Competitive mini-tender under STW framework
	Copywriting	2,596	0.2%	Direct award
Feasibility Assessment and Concept Design	Engineering	275,497	18.7%	Competitive mini-tender under STW framework
	Engineering	44,931	3.0%	Extension to consultant contract procured via competitive mini-tender under STW framework
	Flow Reduction	12,096	0.8%	Extension to consultant contract procured via competitive mini-tender under AfW framework
	Modelling	25,461	1.7%	Competitive mini-tender under AfW framework
Option benefits, development and appraisal	Water resource	-	0.0%	Included in Engineering competitive tender
	Non-water resource benefits	-	0.0%	Included in Engineering competitive tender
	Carbon, wider best value and option appraisal	-	0.0%	Included in Engineering competitive tender
Environmental Assessment	Ecological Monitoring	16,327	1.1%	Competitive mini-tender under AfW framework
	Ecological Monitoring	3,943	0.3%	Extension to consultant contract procured via competitive mini-tender under AfW framework
	Environmental Assessments	67,561	4.6%	Competitive mini-tender under AfW framework
	Environmental Assessments	22,071	1.5%	Extension to consultant contract procured via competitive mini-tender under AfW framework
	Environmental Impact Assessment	49,045	3.3%	Competitive mini-tender under AfW framework
	NAU & EA Area costs	133,406	9.0%	3rd party costs
	Natural England	34,088	2.3%	3rd party costs
Data collection, sampling and pilot trials	Targeted baseline desktop studies	-	0.0%	Included in Engineering competitive tender
	Water Quality Monitoring	159,898	10.8%	Competitive mini-tender under AfW framework
	Water Quality Monitoring	5,252	0.4%	Extension to consultant contract procured via competitive mini-tender under AfW framework
	2D bathymetric survey	20,215	1.4%	Competitive mini-tender under AfW framework
Procurement Strategy	Procurement strategy	51,622	3.5%	Competitive mini-tender under STW framework
Planning Strategy	Minworth Storage Options	1,013	0.1%	Extension to consultant contract procured via competitive mini-tender under STW framework
	Land and planning	39,963	2.7%	Competitive mini-tender under STW framework
Stakeholder engagement	Customer Engagement	31,806	2.2%	Competitive tender, procurement on behalf of all WRSE companies
Legal	Legal advice	9,499	0.6%	3rd party costs
Other		-	0.0%	n/a
Dual leadership costs	Dual leadership costs	336,311	22.8%	Internal costs
Total		1,476,275	100%	

3.2. Scope Efficiency

In order to ensure the scope of work delivered for the Gate 2 submission was efficient, we aligned the programme Work Breakdown Structure to the requirements defined by Ofwat in their Final Determination documentation¹ from RAPID in their published assessment criteria for Gate 2 and also against the Gate 2 reporting template as supplied by RAPID.

The alignment of the workstreams with the Gate 2 submission requirements were cross-referenced to the supporting Technical Annexes or specific section of the Gate 2 report is shown in Table 5. The work that we have completed was all required for a robust submission at Gate 2, aligned closely to RAPID's requirements, and has been subject to independent assurance.

Table 5: Workstream alignment to requirements for Gate 2 submission

OFWAT PR19 Annex 2: Gate Activities and Outputs – Gate 2	Category and Activity	Associated technical annex / chapter
Detailed feasibility and data collection (with increased certainty) in a concept design report	Feasibility Assessment and Concept Design, Water Quality: <ul style="list-style-type: none"> Engineering CDR report Water Quality Monitoring 	Annex A1, B5 Chapters 3, 4, 6, 7, 8, 12, 13
Develop procurement strategy including assessment for potential direct procurement for customers' delivery.	Procurement Strategy	Annex E1 Chapters 1, 3, 7, 8, 12, 13
Pre-planning application activity plan (land referencing, field surveys, environmental permitting plans)	Planning Strategy <ul style="list-style-type: none"> Engineering Environmental Assessment Project plan 	Annexes A1, B3 and F1 Chapters 1, 2, 3, 4, 5, 6, 7, 8, 9, 12, 13
Full comparison of solutions' costs and benefits as tested in regional or national modelling with consideration of inter-regional options and systems impacts	Option benefits, development and appraisal <ul style="list-style-type: none"> Engineering River Modelling Environmental Assessment 	Annexes A and B Chapters 1, 2, 3, 4, 5, 6, 7, 8, 12, 13
Identification of mutually exclusive solutions	Option benefits, development and appraisal <ul style="list-style-type: none"> Engineering Process Options Report 	Annex A1, A3 Chapters 1, 2, 3, 7, 8, 12, 13
External assurance of data and approaches supported by Board statement	Programme and project management <ul style="list-style-type: none"> Assurance 	Annex H1 Chapter 10
Updated regional stakeholder engagement including customer preference studies	Stakeholder Engagement	Annex D1 Chapter 9
Details of efficient spend to gate submission on gate two activities, including	Programme and project management	Annex I1 Chapter 7

OFWAT PR19 Annex 2: Gate Activities and Outputs – Gate 2	Category and Activity	Associated technical annex / chapter
a breakdown of costs against activities and evidence of efficiency of spend (benchmarking or tenders) and assurance		
Assessment of key risks to identify potential regulatory barriers, guidance or changes required for the solution to progress	Procurement Strategy Option benefits, development and appraisal • Engineering	Annexes A1, E1 Chapters 1, 2, 3, 7, 8, 12, 13
Identify impacts of solution on current supply-demand balance delivery plan with simple comparison to current programme solutions	Procurement Strategy Option benefits, development and appraisal • Engineering	Annexes A3, E1 Chapters 1, 2, 3, 7, 8, 12, 13
Identification of any changes in solution partner (other water company) or solution substitutions	No changes identified	Chapters 1, 10
Develop solution programme plan to determine the activities that need to be undertaken prior to each subsequent gate	Programme and project management Project Plan	Annex F1 Chapters 7, 12, 13
Proposals for gate three activity and outcomes, and penalty scale, assessment criteria and contributions	Programme and project management Project Plan	Annex F1 Chapters 7, 12, 13

3.3. Procurement Efficiency

We have applied the following key principles to ensure efficient procurement of the support services required for the Gate 2 submission based on the Utilities Contract Regulations 2016 (UCR):

1. Design services have been procured through UCR complaint frameworks for design services.

Where the frameworks have not been applicable due to scope of services outside the current frameworks across the water partners the following has been applied:

2. For below UCR threshold for services and suppliers £426,955 (January 2022) procurement, a competitive tender in line with the water companies tendering procedures has been carried out as set out in the current procurement letter-agreement;
3. For “above threshold” procurement of £426,955 and not applicable to an existing framework the following would have been followed:
 - for each procurement exercise, one company would assume responsibility for the administrative tasks for both companies tendering in issuing OJEU notices etc;
 - both companies would work together to design and draft the ITT and score the tenderers; and
 - The UCR procurement principles would be followed in full and awarded on that basis.

There have been no “above threshold” packages of work procured for Gate 2, which has meant no formal UCR 2016 procurement has been required. It is noted that the ‘Works’ threshold £5,336,937 (Jan 2022) will only be applicable in later stages when onsite works will be procured.

The approach at point 2 assumes that both water companies are jointly responsible for the UCR 2016 compliant tender process, working together as a single unit in the preparation and scoring of the tenders and addressing any challenges. Liabilities are shared equally. This approach follows the governance and project management processes already in place between the companies.

Common procurement principles are required, in order to ensure the efficient and timely securing of technical and professional support services. A common procurement approach was proposed by the GUC Transfer SRO and adopted across Minworth SRO with the approval of the Programme Management Board (PMB), comprising representatives from the water companies from Severn Trent and Affinity Water. This common approach confirms that all procurement activity shall be undertaken with agreement of the PMB via individual water companies.

These procurement guidelines provide:

- Standardised rules for procurement of services;
- Utilities Contract Regulation 2016 compliant procurement rules;
- Seeking to provide best value for money and demonstrate efficient spend;
- Prioritised hierarchy of standard procurement approaches, including:
 - Mini-competition of existing valid framework suppliers;
 - Direct allocation to a valid framework supplier where the framework agreement allows;
 - Procurement under the regulations for “above threshold” procurement; and
 - Requirement for PMB and water company commercial approval of alternative non-framework or UCR procurement approaches (e.g. direct award) for particular, specialist work packages - to be used by exception.

These procurement guidelines allow governance and control over the procurement of technical services and drive accountable efficiency into the process and have been adopted in the delivery of the Gate 2 submission.

In accordance with these guidelines, where possible, mini-competitions or direct allocation of work packages to suppliers on existing company frameworks have been utilised. The breakdown of Gate 2 spend by procurement mechanism is shown in Table 6.

Table 6 - Breakdown of procurement mechanism

Award Type	Totals by Award type (£, 2017-2018 prices)	% of total spend	% eligible external spend
STW internal resource	69,398	4.7%	7.2%
Framework Mini-bid procured at gate 2	756,031	51.2%	78.5%
Extension to Framework Mini-bid procured at gate 2	89,306	6.0%	9.3%
Direct Award	48,236	3.3%	5.0%
3rd Party	176,994	12.0%	n/a
Dual leadership costs	336,311	22.8%	n/a
Total	1,476,275	100%	100%

3.4. Forecast spend to Gate 3

RAPID Gate 3 guidance (August 2022) confirmed that Gates 3 and 4 allowances will be merged and that the level of expenditure at each gate will not be assessed. As noted in the Guidance, the gate three and four allowances do not include funding for land acquisition, and this element is not included in the SRO's forecast spend. Our Final Determination allowance is £3.15M for Gate 3 and £3.6M for Gate 4 based on a 35% and 40% allocation respectively of £9m total funding.

We have developed a Gate 3 budget through engagement with workstream leads and external stakeholders including EA (via the NAU), NE and DWI. We have referenced the Gate 3 requirements published in the FD and mapped activities and deliverables to achieve those outcomes. A detailed programme for Gate 3 can be viewed in our response to Chapter 7.

Our forecast spend for Gate 3 is provided in Table 7 below.

Table 7: Gate 3 Forecast Spend

Category	Activity	Expenditure Activity (£, 2017-2018 prices)	Expenditure Category (£, 2017-2018 prices)	% of Total Expenditure Category
Programme and Project Management	PM & PMO	650,779	684,753	9.3%
	Assurance	33,974		
Feasibility Assessment and Concept Design	Solution design & support data	3,397,359	5,338,707	72.6%
	Development design sufficient for EA/EIA	1,456,011		
	Modelling	485,337		
	CDM	-		
Option benefits, development and appraisal	Water quality	145,601	148,763	2.0%
	Operational Strategy	3,162		
Environmental Assessment	Environmental (data)	145,601	223,255	3.0%
	National Assessment Unit (NAU) & Environment Agency (EA) Area costs Natural England	77,654 -		
Data collection, sampling and pilot trials	Surveys & data collection	388,270	388,270	5.3%
Procurement Strategy	Procurement and funding strategy (support / advice) (DPC)	67,928	67,928	0.9%
	Engineering procurement (in house, included in hours assessment)	-		
Planning Strategy	Land referencing	29,120	325,176	4.4%
	Land acquisition	-		
	Planning (EIA co-ordinator / planning advisor)	247,522		
	Fees	48,534		
Stakeholder engagement	Stakeholder Engagement	38,827	38,827	0.5%
Legal	Commercial and legal advice	126,188	126,188	1.7%
Other	Other	13,589	13,589	0.2%
Total		7,355,456	7,355,456	100%
Gate 3 Allowance	OFWAT PR19 final determination for Gate 3	3,150,000	3,150,000	
Gate 4 Allowance	OFWAT PR19 final determination for Gate 4	3,600,000	3,600,000	
Underspend from Gate 2	RAPID email 28/09/22	330,725	330,725	
Gate 3 & 4 allowance		7,080,725	7,080,725	
Remaining Budget		-274,731	-274,731	

It should be noted that the Gate 3 forecast and is based upon a number of assumptions, dependencies and risks (as referenced in Chapters 3, 7, 8 and 11 of the Gate 2 submission).

The Gate 3 forecast spend exceeds the combined Gate 3 and Gate 4 allowance. This increase in Gate 3 expenditure is due to a number of factors, including:

- The requirement to treat additional 'emerging substances', which is a scope change since Gate 1; increased Capex solution costs have driven increased outline design fees (note that dialogue is ongoing with the EA to determine final treatment requirements).
- Treatment process bench tests and extended trial plant use to feed into above design.
- Extended programme duration and DCO process support requiring extended / additional resourcing.
- Increased EIA costs to support DCO application.

3.5. Assurance of Current and Forecast Spend

We can confirm that our Gate 2 expenditure and forecast Gate 2 expenditure has been assured by Stantec, our external assurance providers. The outcome of their assessment can be viewed in Chapter 10 and Annex H Assurance Report and Board Statement.