

Strategic regional water resource solutions: detailed feasibility and concept design

Accelerated gate two submission for [solution name]

Date: [insert completion date]

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Guidance for completing this submission

This document should provide a concise summary of the solution's progress and ongoing viability. It is intended to be a factual, standalone summary of the evidence assembled for gate one activities and solution's progress. We expect the submission to be no more than 20-40 pages depending on the complexity of the solution.

The text under each heading outlines what is expected to be included in each section. Please use it as a guide and delete it on completion. Where relevant, cross-reference other sections within this document to avoid duplication.

Any references to materials outside of this document are intended to provide an audit trail. The submission must provide full and comprehensive information about progress of the solution without the need to refer to other materials. However, all documents and data referred to in this submission must be made available to us on request. The number and size of supporting documents included in the submission should be kept to a minimum.

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1. Executive summary

A short summary of the key elements of the submission. It could include an at-a-glance table setting out key facts, conclusions and recommendations that allow comparisons with other solutions and between different options within a solution, highlight key risks and outline viability of the solution.

2. Background and objectives

This should be a very short section outlining what this solution is aiming to address, including requirements set out in the National Framework and regional plan(s), if available.

3. Concept design

Key concept design information developed to a standard suitable for submitting in final regional plans or final water resource management plans, including:

3.1 Solution and options

- Solution description – what does it do?
- Different options and configurations being considered for delivery of the solution including a description of how the solution/options will be operated.
- A description of the key assets to be constructed as part of the solution.
 - Relevant diagrams/schematics.
 - Interaction of this solution with other proposed water resource solutions.

3.2 Feasibility assessment

This section should build on feasibility assessment presented at gate one. It should include an improved level of detail and reduced uncertainties.

- Identification of mutually exclusive solutions.
- Indication of suboptimal solutions or options to be eliminated and viable solutions or options carried forward to the pre-planning stage. It should include an explanation of why solutions and options have been selected for elimination / carry forward.

3.3 Water resource assessment

- Impacts of solution on current supply-demand balance delivery plan with simple comparison to current programme solutions.
- Updated water resource benefit assessment, including potential conjunctive use benefit, consistent with information provided to regional groups to support high-level assessment of regional water resource benefit.

3.4 Drinking water quality considerations

Updated assessment of drinking water quality considerations and potential risks to drinking water quality and supply issues/resilience, including:

- Plan for future work to develop Drinking Water Safety Plans.
- Details of any specific concerns from company Drinking Water Quality teams and how they will be addressed.
- Details of any specific concerns from DWI and how they will be addressed.

Ensure alignment with [DWI guidance](#) on long term planning.

3.5 Environmental assessment

Updated environmental statement, following guidance provided by environmental regulators during development of gate two submission:

- Option-level environmental assessments that meet local requirements and provide information consistent with Strategic Environmental Assessment and Habitats Regulations Assessments and other statutory assessment requirements, including consideration of in-combination effects and identification of environmental risks that need mitigating through the solution design and costing.
- Environmental, social and economic valuations (or metric benefits) consistent with principles in the National Policy Statement and Water Resource Planning Guidelines.

Include main conclusions and issues arising including results of environmental work carried out to date and plan for future work:

- How the solution contributes to environmental net gain.

- The carbon impact of the solution and initial outline of how the solution will take into account the carbon commitments¹.

3.6 Wider benefits assessment

- Outline solution's wider benefits including resilience benefits and those for other sectors (for example, benefits from reduced flood risk), as appropriate.
- Explain how the solution provides best value outcome for customers and the environment compared to other solutions. If there are multiple options, include a clear comparison showing which is preferred and why.
- Explain resilience criteria that will be used to assess the solution.
- Outline the social and environmental benefits of the solution including amenity value.

3.7 Solution costs

Key solution cost information building on gate one with reduced uncertainty in costs and benefits:

- Overall costs of the solution, construction and operation for each option.
- Detail of capital expenditure.
- Detail of operating expenditure - include an indication of design life of the asset and any significant maintenance liabilities during operational life, taking utilisation into account.
- Full comparison of net present value for all options.
- AIC for all options using method consistent with that used in WRMP24.
- Optimism bias.
- Assumptions and exclusions.
- Confirmation that solution costs are in line with relevant methodologies agreed with regulators and relevant green book guidance.
- Comparison of solutions' costs and benefits with alternatives (as tested in regional or national modelling, with consideration of inter-regional options and systems impacts).

¹ These are the water industry's Public Interest Commitment of net zero by 2030 for operational emissions, and the UK government target to bring all greenhouse gas emissions to net zero by 2050. This could also include any additional commitments an individual company or region has made. We expect companies to take full account of their greenhouse gas emissions in their decision making. Operational and embedded carbon emissions must be part of the 'best value' scheme assessment.

4. Programme and planning

4.1 Project plan

Clear project-level plan that sets out the key solution-specific milestones to delivery and includes key activities and outputs that need to be undertaken and achieved prior to each subsequent gate. It should include sufficient detail to support assessment of progress in relation to delivery incentives (ie, clarity around important milestones and interdependencies):

- Date when solution is required (based on company and regional plans, as appropriate), and any updates if this changes.
- Phasing of key activities and decisions.
- Assumptions and dependencies.
- Pre-construction activities (such as scoping, detailed design, planning approval(s) including development consent order (DCO) where relevant).
- Outline plan for when DPC control points will be met.
- Planned construction start date.
- Earliest possible deployable output date (assuming planning started today) – which might be significantly earlier than the required date.
- Identify whether the programme is still on track.
- Include an estimate of overall project delivery timescales for subsequent gates.
- Missing information – outline what is missing/delayed, and how this will be addressed before gate three. Provide reasons for any missed milestones and impacts on the overall programme caused by delays.

4.2 Planning route

- Explain the preferred planning route for the solution – ie, is it likely to require Development Consent Order (DCO) or will it be promoted through a normal planning route (ie T&CP)?
- Pre-planning application activity plan (land referencing, field surveys, environmental permitting plans)
- Highlight the key planning steps and risks (or cross-reference if they are covered elsewhere in this document – for example, in the Stakeholder engagement section, if opposition from a particular group is likely to be encountered).

4.3 Key risks and mitigation measures

An assessment of key risks to the solution's planned progress to completion (including requirements at gates). This should include risks to costs and benefits, programmes of work,

dependencies, assumptions; potential regulatory barriers to solution's progression; guidance or changes required for the solution to progress.

- Include the output of a risk assessment exercise showing the original and residual risk scores following mitigation. Outline any suggested mitigation measures.
- Explain where not consistent with quarterly dashboards.

5. Procurement, ownership and operation

Updated procurement strategy:

- Assessment for potential Direct Procurement for Customers (DPC) delivery including:
 - An assessment of eligibility criteria; size, discreteness and value for money.
 - Any externalities that may present timetable or other constraints to delivering via a DPC route, and how these can be mitigated.
- An assessment of any alternative procurement routes that have been considered.

Updated preferred model of ownership and operation including the outline of:

- The anticipated operational utilisation of the solution on the basis of a dry year annual average resource position.
- The extent to which the solution is designed to operate during times of peak demand - during incidents or as part of an emergency response.
- Commercial arrangements between the parties depending on the operation plan, as available.

6. Costs to gate two and forecast

Evidence of appropriately allocated efficient expenditure presented in 2017-18 price base, including:

- The breakdown of costs should be presented against activities agreed to be undertaken by gate two. These should be further broken down if any cost line is greater than £0.5 million in value.
- Evidence of efficient expenditure (such as benchmarking, tenders or unit rates).
- Explanation, if actual spend greater than allowance.

List of activities included in planned expenditure to gate two but not carried out.

- Forecast of expenditure to gate three.

7. Stakeholder engagement

Updated stakeholder engagement (including regional) to identify any issues that need further investigation:

- Overview of engagement undertaken, completeness of stakeholder representation and key findings.
- High level summary of stakeholders' views and how they have been reflected in the work undertaken.
- Customer preference studies, how they have been reflected in the work undertaken, and conclusions reached.
- Any outstanding work or work to be undertaken before the next gate.

8. Board statement and assurance

A statement from the Board of each of the solution owners in its own words to provide assurance that:

- it supports the recommendations for solution progression made in this submission;
- it is satisfied that progress on solution is commensurate with the solution being in place and operating by the end of 2027;
- it is satisfied that the work carried out to date is of sufficient scope, detail and quality to support delivery of the solution by the end of 2027;
- it is satisfied that expenditure has been incurred on activities that are appropriate for gate two, and is efficient.

Your assurance statement(s) should clearly set out the evidence, information and external and/or internal assurance that the Board has considered in providing assurance on each of the above points.

9. Proposed gate three activities and outcomes

Proposals for gate three activity and outcomes, penalty scale, assessment criteria and contributions:

- Set out your proposals for gate three activities, outcomes, penalty assessment criteria and incentives, including an explicit consideration of solution delay impacts.

10. Conclusions and recommendations

Concise summary of the conclusions of the detailed feasibility assessment.
Recommendations from the sponsors on:

- Whether the solution (and which of its options) should progress to gate two.
- Approaches to resolving any major risks or barriers to scheme progression.

11. Supporting documentation

Table summarising the agreed gate two activities with reference where further detail can be found, including any actions and recommendations given by RAPID at the previous gate.

Data tables including cost and benefit profiles consistent with WRMP24 reporting requirements.