
Gate one query process

Strategic solution(s)	LTWLR
Query number	LTW001
Date sent to company	13/02/2026
Response due by	19/02/2026

Query

This query is relation to Section 4.2 of your Gate 1 Submission.

Capital Estimates

1. In your submission you have provided a capital estimate range for five options. For your indicative option, please can you provide a more granular breakdown of the costs (£m) associated with the individual engineering elements? These can be provided to us as a range.
2. In your submission you noted that the capital estimate has an allowance for optimism bias costed in:
3. Please can you provide this amount in both monetary terms (£m) and percentage terms for all five options.
 - a. Please can you provide us with the assumptions used, including the project type(s) assumed.

Operational Estimates

4. Within your submission, you have provided us annual opex estimates, however we have been unable to identify any estimates in relation to the project's fixed and variable opex. Please can you provide these costs to us for each option presented? These can be provided to us as a range.

General

5. Within your submission, you note cost estimation has been supplemented with benchmark data from similar schemes. Please can you provide us further detail on which schemes these are?
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Solution owner response

Capital Estimates

1. In your submission you have provided a capital estimate range for five options. For your indicative option, please can you provide a more granular breakdown of the costs (£m) associated with the individual engineering elements? These can be provided to us as a range.

TW response:

Please find cost breakdown by project element for the indicative proposed solution (all figures in £m 22/23 prices):

Element	Lower	Upper
Land	13	24
Intake	8	14
Tunnels	343	611
Shafts	109	194
Pipeline Rehabilitation	30	53
Pumping Station	12	22
Outfall/Connection to Reservoir	35	62
Total	550	980

2. In your submission you noted that the capital estimate has an allowance for optimism bias costed in.
 3. Please can you provide this amount in both monetary terms (£m) and percentage terms for all five options. (a) Please can you provide us with the assumptions used, including the project type(s) assumed.
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TW response:

Optimism Bias was calculated on the assumption that the project is non-standard infrastructure. No allowance has been included for a Quantitative Costed Risk Assessment at this early stage of option development. As a result, Optimism Bias has not been scaled back meaning each of the 5 options had 66% applied. Please find summary of OB values below (all figures in £m 22/23 prices):

Option	OB Value
Indicative proposed solution	294
Alternative solution 1	477
Alternative solution 2	553
Alternative solution 3	342
Alternative solution 4	417

Operational Estimates

4. Within your submission, you have provided us annual opex estimates, however we have been unable to identify any estimates in relation to the project's fixed and variable opex. Please can you provide these costs to us for each option presented? These can be provided to us as a range.

TW response:

As noted in paragraph 4.21 of the gate one report, "Initial operating cost estimates for gate one are based upon an indicative assumption of 90 days per annum operation, to cover use during peak demand periods. This will be reviewed and refined during later project stages as the utilisation is confirmed."

The breakdown of these annual opex cost estimates, by fixed and variable opex costs, are shown in the table below.

Solution name	Fixed Opex (£m)	Variable Opex (£/MI)
Indicative proposed solution for gate one	0.8	19.9
Alternative solution 1	1.2	43.9
Alternative solution 2	1.3	43.9
Alternative solution 3	0.9	44.6
Alternative solution 4	1.0	44.6

General

5. Within your submission, you note cost estimation has been supplemented with benchmark data from similar schemes. Please can you provide us further detail on which schemes these are?

TW response:

It is common practice to exclude specific references to benchmarked projects to avoid potential confidentiality issues. The main elements that were benchmarked are the Tunnels and Shafts (which comprise >80% of the LTWLR direct works for the indicative proposed solution). The benchmarking consisted of 2 projects containing works of a similar scale and which were delivered in London within the last 10 years.

Date of response to RAPID	[REDACTED]
Strategic solution contact / responsible person	[REDACTED] [REDACTED]