

Gate three query process

Strategic solution(s)	London Water Recycling
Query number	LWR013
Date sent to company	29/01/2025
Response due by	31/01/2025

Query

We have reviewed the gate report and Annex A2 and need further clarification on the key risk mitigation measures and the costed risk values.

- The post-mitigation RAG rating for some risks remain unchanged. Could you direct us to where we can view the RAG-rating methodology/rationale to help us understand the post-mitigation RAG rating for each risk?
- For the key delivery costs outlined in Table 4.8, in section 4.5.1 of Annex A2, could you direct us to where we can view the estimates for each individual risk?

Solution owner response

This response has been written in line with the requirements of the RAPID Gate 3 Guidance and to comply with the regulatory process pursuant to Thames Water's statutory duties. The information presented relates to material or data which is still in the course of completion. Should the solution presented be taken forward, Thames Water will be subject to the statutory duties pursuant to the necessary consenting process, including environmental assessment and consultation as required. This response should be read with those duties in mind.

Q1: The post-mitigation RAG rating for some risks remain unchanged. Could you direct us to where we can view the RAG-rating methodology/rationale to help us understand the post-mitigation RAG rating for each risk?

R1: Annex A2 Section 3.3.9 to 3.3.17 explains the methodology and rationale of the Risk Assessment matrix. Risk RAG rating is shown in Annex A2. Table 3.1 as Black, Red, Amber, Yellow (instead of Green for accessible reading), this is the basis of our RAG ratings.

You refer presumably to TDRA Gate 3 Report Table 6-2; Key Project risks and mitigation measure table with RAG rating.

Risk is level of impact (Threats) x likelihood therefore post mitigation RAG rating will in some instances remain unchanged despite reducing either the likelihood or level of impact by one level.

			RISKS				
			THREATS				
Likelihood	Very Likely	5					
	Likely	4					
	Possible	3					
	Unlikely	2					
	Remote	1					
			Very Low	Low	Medium	High	Very High
			1	2	3	4	5

Q2: For the key delivery costs outlined in Table 4.8, in section 4.5.1 of Annex A2, could you direct us to where we can view the estimates for each individual risk?

R2: Table 4.8, in section 4.5.1 of Annex A2 is an aggregated summary of delivery focussed key risks which brings together a number of risks under common themes.

We have not published estimates for each risk we have modelled. Risks are input with min. max. and most likely values and a probability distribution applied. The risks are modelled through Monte-Carlo analysis (refer Annex 2, section 3.3.16 to 3.3.17). We ran a series of scenarios to evaluate an overall most likely cost value of the risks identified. Individual risks do not therefore have a specific contribution value to report, hence why we have not published individual risk values.

The Monte Carlo simulation is a probabilistic model that includes an element of uncertainty or randomness in its prediction. When you use a probabilistic model to simulate an outcome, you will get different results each time, we ran simulations with 10,000 iterations to simulate potential risk outcome scenarios. Each simulation was run with a minimum of 10,000 iterations with Latin Hypercube sampling, with the 50th percentile (P50) (Most Probable) of the output distribution used as the costed risk for the overall Project.

Date of response to RAPID	31/01/2025
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