OPM

29 August 2016

National Audit Office
157-197 Buckingham Palace Road
Victoria
London
SW1W 9SP
United Kingdom

For the attention of: Simon Reason, Director

Dear Sirs,

Investigation into assurance arrangements over the Thames Tideway Tunnel

This is my submission of evidence to your investigation into the assurance arrangements over the Thames Tideway Tunnel. My relevant background is as a civil engineer with wide experience of cost-benefit analysis and as a management consultant specialising in the governance of projects.

I request that you investigate these assurance aspects.

1. Responsibility

   Good practice and the Government's own OGC Gateway Process which is part of its assurance framework, require that Senior Responsible Owners (SROs) must be senior and must take personal responsibility for successfully delivery of the project. They should be recognised as the owner throughout the organisation. There seems to be doubt as to the effective identification and continuity of this role throughout this project.

   As stated in the Gateway process, SROs should be aware of the extent and limitations of the various review processes – for example, the fact that an OGC Gateway Review has taken place does not replace the need for a full audit opinion on the effectiveness of risk management, control and governance in the audited area. Have SRO's sought sufficient independent audits of such aspects involving adequate communication with stakeholders?

   Taking personal responsibility implies public identification of and appropriate repurcussions for SRO's who committed massive public money on this scheme if the business case proves unjustified, as might become evident after design, build and test at Gate 4 Completion. Is this requirement assured?

Oxford Project Management Ltd
80 Fulham Park Gardens, London, SW6 4LQ
Tel and Fax: +44 (0)7876199943, Email: Enquiries@opmg.co.uk
Company registration number: 2315791

Updating of the business case is a Gateway process requirement. Has this been done by the Government, not just by the project's promoters, on a sufficiently frequent and timely basis?

2. Decisions

At the most relevant recent gateway decision Gate 3.2 Commit to construct the decision to proceed was required to have been based on documented assumptions. These assumptions should have been logged with plans to verify them and a defined process for managing them as issues should circumstances change.

With such a long time-scale project, clearly circumstances have changed as noted below. Was the process for managing issues arising out of changes in assumptions adequately defined? Is its implementation assured?

3. Assessment of Delivery Strategy Approach

With long time-scale major projects where little benefit arises until after completion, delivery and contract strategy must allow for cost-effective early termination should the business case collapse. This is good governance and requirement 1.8 of the OGC process Assessment of Delivery Strategy Approach. Have strategic decisions assured that this is provided for?

4. Risks

Risks arise from many causes, not least from changes in the assumed Social, Technical, Environmental, Economic, Political, Legal and Ethical (STEEPLE) context. I attach a paper prepared in February 2016 summarising key risks. Note that in this paper the Thames Tideway Tunnel is referred to as the Thames Tank.

These paragraphs from a letter sent to the editor of the New Civil Engineer magazine expand on just one of the risks identified in the paper as professional constraints

"Codes of practice of relevant professions such as in Project Management and Civil Engineering require consideration of the public good. Examining our [ICE] current Code of Professional Conduct it is striking how we professionals are in our work responsible for "the public good". The Institution's guidance on this aspect includes taking account of the broader public interest including all stakeholders. The guide also states that engineers are increasingly called to account for their decisions, especially where projects are controversial or are opposed by particular interest groups. This approach is reinforced by the Engineering Council's 2010 six sustainability principles.

"This is highly demanding of us professionals, requiring considerations beyond those of technical engineering such as:

- optimum use of resources, whether financial, natural capital or human,
- communication protocols with stakeholders,
- identification and proper consideration of disbenefits as well as of benefits,
- impact on future generations of people, and our environment,
- adequate professional engineering involvement in high level management decision making.

"Schemes considered excellent at concept can become sub-optimum during later phases due to either external causes such as changes in STEEPLE factors (Social, Technical, Environmental, Economic, Political, Legal, Ethical) or internal due to design, procurement, duration and cost developments. Throughout it is necessary that the professional engineer should know when to remove themselves from a scheme rather than compromise professional integrity. The temptation for any engineer is to see a project through, but this might clash with these professional obligations."

Hence if the perception arises that the TTT is not in the public's interest, much needed professionals might not be available.

5. Technical changes

Much has been written on the recent technical and managerial improvements created and demonstrated for management of waste water in urban areas. Some of these, such as metering, free water saving devices, promotion of SuDs and the reduction of illegal connections, are already being implemented effectively by Thames Water. Clearly these need to be factored into any updating of the business case. The attached diagram on options seeks to demonstrate the range of potential improvements that should be taken into account.

The recent establishment within Thames Water of a Transformation and Technology Alliance to encourage innovation and cost saving is relevant. However the Government should not rely on information solely from this source within the promoters of the TTT to reassess the cost benefit in the light of these recent and likely major changes in context. Independent input is required for adequate assurance. Has this been sufficiently obtained?

6. Economics

   The 2015 DEFRA update on costs and benefits of the TTT states it is particularly uncertain about the benefit estimates. Economic justification for the project depends on three questionable assumptions that need investigation. One is that the benefits from the TTT as a proportion of the benefits from the wider investment in reducing SWO into the Thames is higher than proportional to relative impact on overflows. Assurance is required that the business case does not rely on such an overgenerous allocation.

   The economic case also argues that there are wider economic benefits from such infrastructure expenditure. This is clearly special pleading, since a) the country and its citizens are deeply in debt so that the costs will need to be paid for by reduced spending and fewer jobs in future and b) there is no clear evidence that such spending now on infrastructure in London is more beneficial in terms of jobs, skills development and wider growth than equivalent spending on other desirables elsewhere. Such arguments should not form part of the assured justification for the project.

   Lastly the cost benefit case relies on assigning greater benefit to higher income earners than to others. Whilst this might be valid financially, it is not becoming of such a public benefit estimate by our Government and should be excluded from their assured economic valuation.

I hope that this submission informs the scope and content of your investigation in which I place great confidence, having long been a supporter of your important role and an admirer of your achievements.

Yours sincerely,

David Shannon

David Shannon, MA, MICE, HonFAPM, FIC, CMC, DipAF

Attachments:

Risk Table
Thames Tideway Tunnel and other options

Copy: Lord Tony Berkeley