

London Councils' TEC Executive Sub-Committee

Thames Tideway Tunnel – Update Report

Item no: 3

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Summary

This report updates members, following the report on this issue to the TEC Executive Sub-Committee of 12 July. The report summarises the considerations underpinning the Government's decision to allow the construction of the Thames tideway tunnel. This report will be supported by a presentation from an officer of the Environment Agency, who have regulatory oversight, and a representative of Thames Water Utilities who will be responsible for delivering the project. Both representatives will be available to answer members' questions.

Recommendations

Members are recommended to:

- Note the background to the Government's decision on the construction of the Thames tideway tunnel.
- Agree to receive further reports on this issue as implementation progresses.

Background

1. The London sewer system combines foul sewers with the system for collecting rain water run-off. Sewer overflows are a design feature of such combined systems and overflows will occur in certain circumstances. When the system becomes overloaded from rainfall, overflows of sewage and rainwater discharge some of the excess into the Rivers Lee and Thames to reduce the risk of sewer flooding of properties, and the overloading of London's sewage treatment works. As a result of current weather patterns of heavy rainfall and flash flooding, overflows into the Thames are occurring at the rate of about once every week, sometimes with severe consequences for ecology and amenity of the Thames.
2. In 2000 the Thames Tideway Strategic Study (TTSS) Group including members from Thames Water Utilities (TWU), Defra, the Environment Agency (EA) and the Greater London Authority (GLA), with the Office of Water Services (Ofwat) in an observer capacity, examined the issue of the combined sewer overflows (CSO) affecting the Thames Tideway and the River Lee.

Their remit was to identify the overflows of concern, understand their impact and define objectives against which solutions could be developed.

3. In June 2004 the TTSS Group produced a report proposing a 34km tunnel beneath and following the course of the Thames Tideway to collect the overflows, and treatment of the waste water in east London. Following consideration of the report and given the time it would take to deliver this solution – estimated at up to 15 years - Government asked the TTSS to look into smaller-scale measures which could provide earlier solutions, and for further information on the proposed tunnel option. The TTSS received a final study report in February 2005 and a supplementary report to Government in November 2005
4. Ofwat commissioned Jacobs Babtie consultants to review the reports and to suggest alternatives to the TTSS preferred solution. This report was presented to Ofwat in February 2006.
5. In December 2005 a Defra led Working Group was convened to consider the findings of the TTSS reports and the Jacobs Babtie review. This work resulted in a shortlist of two options being produced in July 2006. Defra subsequently asked Thames Water to develop and assess these two options in detail and report back by 31 December 2006. The options were:
 - Option 1: A tunnel over 30km long to intercept intermittent discharges from unsatisfactory overflows along the length of the tidal Thames and convey the waste water for treatment in east London. Alternatives within the option were a 6 metre diameter tunnel (the minimum assessed to avoid operational problems), and a 7.2 metre diameter tunnel (the TTSS preferred alternative).
 - Option 2: Two shorter tunnels, in west and east London, to intercept intermittent problem discharges along these stretches of the river, and probably additional treatment in east London.
6. For each of these options, alternative tunnel diameters/routes were assessed and costed by Thames Water. Thames Water provided its assessment of the options in a summary report submitted to Defra Ministers on 29 December 2006.
7. Dave Wardle, Thames Regional Strategic Manager at the Environment Agency will attend committee to provide some more background to the Government's decision, outline some of the issues, and give some indication of how things are likely to progress.

Current Situation

8. Following seven years of assessment of the options, Government has now decided on a solution. The preferred option is for a single 30km tunnel of 7.2m diameter under the Thames, to intercept discharges from Hammersmith to Beckton, with an early phase side link from Abbey Mills to Beckton. The project is expected to cost at least £2 billion and is expected to be delivered by 2019/20. On 22 March 2007, the former Environment Minister, Ian Pearson announced the Government's decision and asked Thames Water to progress the chosen solution to planning and financial approval stage.
9. The early phase work involving construction of a link tunnel from Abbey Mills to Beckton to collect the large and frequent discharges occurring at Abbey Mills is projected to proceed more quickly to meet the requirements of the Urban Waste Water Treatment Directive as soon as possible, and with the aim of being completed in time for the Olympic and Paralympic Games. However this is a large and complex project likely to entail use of established technology but at an unprecedented scale in this field of operation. This carries high risks of delays occurring which could significantly affect planned delivery timetables. In case a permanent solution to Abbey Mills discharges cannot be in place by the time of the Olympic and Paralympic Games, interim contingency measures to mitigate the effects of the discharge are being investigated in parallel.

Affordability

10. Thames Water, and by implication, its customers will pay for the delivery of this infrastructure. The Government's announcement on 22 March indicated that the Tideway Tunnel option would add an estimated £37 to Thames Water sewerage bills by 2017. Ofwat, the economic regulator must ensure that Thames Water is able to properly finance this project in determining the company's price limits for future years.
11. Ofwat is currently examining alternative financing models with the overall objective of delivering a mechanism that provides the best value for customers. Ofwat is approaching this on the basis that the project is different in scale and duration when compared with the capital programmes that Thames Water has delivered to date and therefore presents a different set of risks. The regulator is working with Thames Water to explore two broad financing alternatives:
 - Option A – Thames Water financing and procuring the construction of the Tideway and maintenance thereafter as a regulated company, with the regulatory regime adapting to take account of the specific risks associated with the project. Thames Water is due to provide further details of the risk sharing mechanisms that would need to underpin this option in the next month.
 - Option B – A special purpose vehicle (SPV) established solely to finance and procure construction and maintenance of the Tideway. There are various ways under this option that the project could be regulated by Ofwat and the legal constraints to this option are being looked at by Ofwat's legal advisors. There are likely to be variants to this option in terms of the scope of the contracts (constructions and/or maintenance) and/or who might procure the contracts (who would be the client).
12. The Regulatory Impact Assessment (RIA) of the Tideway Options notes that Ofwat has estimated the incremental bill impacts but only in relation to design and construction costs. The modelling, with contributions from the Consumer Council for Water (CCWater) does not take account of longer term issues such as ongoing costs associated with the maintenance of the tunnel solutions and asset replacement costs which will impact on bills beyond the construction phase. The RIA modelling suggests that more than 20% of Thames Water customers would be in water poverty (i.e. paying over 3% of disposable household income on water bills by 2012/2013 if the Government's preferred option goes ahead.
13. Steve Walker, Major Projects Director at Thames Water Utilities will also be attending committee to outline the implementation process and may be in a position to update committee on project financing arrangements.

London Councils Involvement

14. London Councils and boroughs have been outside the development process up until now. However, CCWater have raised concerns about the potentially significant financial and social impacts on residents and businesses. London Councils has been successful in the past in securing a better deal for residents such as in the intervention over Thames Water's charges for the installation of pumps in high rise buildings to deal with low water pressure. The tideway tunnel is an even bigger project and its delivery should be influenced by the voice of boroughs.
15. London Councils could seek to influence proposals in the context of a comprehensive assessment of the region's needs and seek a joined up strategy for all its water problems, including water supply. There are a number of ongoing Thames Water and related projects as part of current investment programmes. There are also a number of very large scale projects such as the Olympics and Crossrail, which will be running in parallel with the construction timetable for the tideway tunnel. These pressures are likely to result in higher and rising costs as well as intolerable disruption over an extended period. The need for

London's water environment to meet legal requirements has to be balanced against the capacity and willingness of consumers to support and pay the costs of these major projects.

16. Further, there will be spatial planning implications for boroughs. The detailed engineering proposals are unprecedented. There may be concern amongst residents about such large scale tunnelling. The work will cause significant disruption to transport and may similarly affect other infrastructure. Given the pan-London nature of the problem to be resolved and the tight timescale for delivery, boroughs may need early agreement on a set of common principles to ensure that the proposals are rigorous and well considered, but also that the work is not delayed unnecessarily by individual planning authorities. Undue delays to the implementation of the agreed solution will lead to an increase in the already high costs projected.
17. The June meeting of the Thames Tideway Advisory Group (TTAG) which replaced the Thames Tideway Strategic Study¹ (TTSS) group and the later formed Working Group on the Thames Tideway and the 2012 Olympics², wound up the Group. Defra have now set up a new Group to bring the two groups above together, with a focus on implementation. London Councils' officers have sought and secured a seat on this new Tideway Implementation Group. The first meeting of the Group is yet to be arranged.
18. Further, the Environment Agency (EA) will be setting up a specific strategic implementation group, the Olympics Measures Group, to explore the specific measures required to be taken to deliver the Olympics objectives for London's waterways and to manage the projected discharges. This Group will take account of both the Urban Waste Water Treatment Directive and the Water Framework Directive obligations. London Councils officers have expressed an interest in being involved with this group although it may be more appropriate or sufficient to have representation from an Olympic borough. This is still being pursued with the EA.

Financial Implications for London Councils

19. The detailed financial implications for London Councils or for boroughs are as yet unclear. The implications will become clearer when the proposed options for a financing mechanism have been fully considered and agreed.

Legal Implications for London Councils

20. There are no specific legal implications for London Councils from this report.

Equalities Implications for London Councils

21. There are no specific equalities implications for London Councils from this report.

Recommendations

22. Members are recommended to:

- Note the background to the Government's decision on the construction of the Thames tideway tunnel.
- Agree to receive further reports on this issue as implementation progresses.

¹ Incorporating Thames Water (TW), the EA, Defra, the GLA, plus Ofwat as an observer, meeting under independent chairmanship.

² Incorporating the members of the TTSS and London Thames Gateway Development Corporation, British Waterways, the Olympic Development Authority, and several other Government departments.