

This Reasons Notice has been prepared in draft for consultation in accordance with regulation 5(4)(a) of the SIP Regulations. It reflects the Secretary of State's current view on the reasons for permitting or requiring Thames Water Utilities Ltd (as the incumbent undertaker) to undertake such preparatory work of such kind and for such purpose in relation to the Thames Tideway Tunnel Project as he has set out in the draft Thames Tideway Tunnel Project Preparatory Work Notice. The reasons are subject to change in light of any responses received from the consultation.

[DRAFT] REASONS NOTICE

THE THAMES TIDEWAY TUNNEL PROJECT PREPARATORY WORK NOTICE

This Reasons Notice is given in accordance with section 195A of the Water Industry Act 1991 (as applied and modified by the Water Industry (Specified Infrastructure Projects) (English Undertakers) Regulations 2013¹ ("the SIP Regulations") and sets out the Secretary of State's reasons for the giving of a notice under regulation 5(3) of the SIP Regulations permitting or requiring Thames Water Utilities Ltd to undertake such preparatory work of such kind and for such purpose in relation to the Thames Tideway Tunnel Project as he has set out in the Thames Tideway Project Preparatory Work Notice ("the Preparatory Work Notice").

The Secretary of State has, before exercising the power in regulation 5(3) of the SIP Regulations, prepared draft reasons and has consulted as required by regulation 5(4)(a) of the SIP Regulations.

BACKGROUND

The legislative framework

1. The Flood and Water Management Act 2010 amended the Water Industry Act 1991 ("the Act") by inserting a new Part 2A which conferred powers on the Secretary of State to make regulations about the provision of infrastructure for the use of water undertakers or sewerage undertakers. Pursuant to these powers the SIP Regulations were made on 27 June 2013 and came into force on 28 June 2013.
2. Regulation 4(1) of the SIP Regulations allows the Secretary of State or the Water Services Regulation Authority ("Ofwat") to specify by notice an infrastructure

¹ S.I. 1582/2013

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project in certain circumstances. An infrastructure project is a project or part of a project in connection with designing, constructing, owning or operating infrastructure relating to the provision of a system of water supply or a system of sewers (or provision of means for emptying or dealing effectually with the contents of sewers). It is a project which an incumbent water or sewerage undertaker must ordinarily undertake to fulfil its statutory duties under section 37 (general duty to maintain water supply system etc.) or section 94 (general duty to provide sewerage system).

3. Once specified, the incumbent undertaker is prohibited under regulation 5(1) of the SIP Regulations from undertaking that infrastructure project although the Secretary of State (or Ofwat) may permit or require that incumbent undertaker to undertake such “preparatory work” as they may set out by notice in writing². The SIP Regulations define “preparatory work” as including:
- (a) conducting surveys, including in relation to environmental matters, ground conditions, hazardous substances, heritage, the operation of existing infrastructure, ground and surface water quality and the general condition of a site,
 - (b) arranging for the provision of electricity or other power,
 - (c) diverting or protecting communications, electricity, gas, water and sewerage assets,
 - (d) preparing designs and specifications for a specified infrastructure project,
 - (e) preparing and submitting planning applications, including consulting the public in relation to those applications, and acquiring and protecting interests in land,
 - (f) procuring goods, services or works,
 - (g) preparing a site for works, including remediation of contamination, laying access roads and undertaking demolition and clearance works, and
 - (h) undertaking associated works on the highway³.

² See regulation 5(3) of the SIP Regulations

³ For the definition of “preparatory work”, see regulation 2 of the SIP Regulations

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4. Before issuing a preparatory work notice, regulation 5(4)(a) requires the Secretary of State to prepare draft reasons and to consult the incumbent undertaker, Ofwat, where any part of the infrastructure in question is or is to be in Wales, the Welsh Ministers, and any other person the Secretary of State thinks appropriate. Regulation 5(7) provides that the Secretary of State may, having regard to any costs already incurred in pursuance of the notice, by notice vary or revoke the preparatory works notice.
5. Once specified, the incumbent undertaker is also required to put the specified infrastructure project (including the financing) out to tender. Having put it out to tender and selected the successful bidder, the Secretary of State (or Ofwat) has the power to designate by notice as an "infrastructure provider" a company which appears to be wholly or partly responsible for the specified infrastructure project ("IP"). The IP may then be licensed and regulated under a modified version of the regulatory regime set out in the Act.

The Thames Tideway Tunnel Specified Infrastructure Project Notice

6. [The Secretary of State specified the Thames Tideway Tunnel Project as a specified infrastructure project immediately before issuing this preparatory works notice. A draft of the Thames Tideway Tunnel Project Specification Notice together with a draft reasons notice for giving that notice were the subject of a consultation which was held between [XXXX] and [XXXX].

[Consultation on the Thames Tideway Tunnel Preparatory Works Notice]

7. In accordance with regulation 5(4) the Secretary of State consulted:-
 - (i) Thames Water Utilities Ltd;
 - (ii) Ofwat;
 - (iii) Mayor of London;
 - (iv) Local authorities in London, through which the Tunnel is expected to pass;
 - (v) London MPs with a known interest;
 - (vi) EFRA Committee MPs;
 - (vii) Water and Sewerage companies in England; and
 - (viii) Consumer Council for Water.

The consultation ran in parallel with the consultation for the specification notice and the outcome was [to be inserted]

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The Thames Tideway Tunnel Project

Project Description

8. The sewerage system in central London is a combined sewer system in which both surface water runoff and foul sewage enter the same drainage system and are conveyed to sewage treatment works for treatment. It is estimated that on average 39 million tonnes per year of untreated sewage and surface water has been overflowing into the Thames Tideway (the River Thames and the River Lee) from these combined sewers as a result of their capacity being exceeded as a result of rain. While the system was designed to overflow into the River Thames during heavy rainfall, it currently overflows even during modest rainfall due to an increased population, higher water use per capita and increased development leading to greater runoff of surface water.
9. The Court of Justice of the European Union, in its judgment of 18 October 2012 (Case C-301/10), found the UK to be in breach of its obligations under the Urban Waste Water Treatment Directive (Directive 91/271/EEC. The "UWWTD"). In particular the level of sewage discharge into the River Thames was unacceptable.
10. Current improvements to five sewage treatment works at Beckton, Crossness, Long Reach, Mogden, and Riverside coupled with the construction of the Lee Tunnel are expected to reduce the current annual volume of overflows to around 18 million tonnes by 2015. However this level remains unacceptable and is not compliant with the UWWTD.
11. A variety of solutions have been investigated over the last ten years with the conclusion that a full length Tunnel is the preferred solution. Government's support for the Tunnel as a solution was originally set out in March 2007, when Defra published its *Regulatory impact assessment – sewage collection and treatment for London*. This publication drew on the conclusions of the independent 2005 Thames Tideway Strategic Study (TTSS), which described the

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problem with combined sewage outflows into the Thames and assessed a number of options for delivering improvements; the Tunnel was central to the option recommended by the TTSS. Government commitment to the Tunnel was reiterated in Ministerial Statements in 2010 and 2011; in the November 2011 Defra publication *Creating a River Thames fit for our future: A strategic and economic case for the Thames Tunnel*; and in Defra's *National Policy Statement for waste water* published in February 2012. Reviews in 2012 and 2013 found that the evidence supporting the case for the Thames Tideway Tunnel, and hence the case itself, was still valid.

12. The Thames Tideway Tunnel is planned to have a minimum storage capacity of 1.24 million cubic metres and to extend for approximately 25 km along the length of the River Thames between Acton and Abbey Mills. It will sit between 20m and 70m below the surface and have a diameter of approximately 7m. Along its course it will intercept 34 of the Combined Sewer Outflows (CSOs) which currently connect the existing sewerage network to the river. The interception of the CSOs allows for overflow of surface water and sewage to be diverted into the Tunnel for onward conveyance to sewage treatment works and subsequent discharge as treated effluent.
13. As the undertaker for the area the responsibility for compliance with the Urban Waste Water Treatment (England and Wales) Regulations 1994 (S.I. 1994/2841) (which implement the UWWTD) lies with Thames Water Utilities Limited ("TWUL"). As a result of the Thames Tideway Tunnel Project Specification Notice, TWUL is prohibited from undertaking the works necessary to achieve compliance. Instead, it is now required to put those works out to tender.

Project Costs

14. The Thames Tideway Tunnel Project is a project whose current estimated cost is £4.2 billion at 2011 prices and at a 'P80' level i.e. where it is estimated that there is an 80% chance the final cost of the project will be £4.2 billion or less. That project cost, in accordance with normal practice, excludes financing costs and taxation costs.

Extent of works included in the Thames Tideway Tunnel Specified Infrastructure Project Notice

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15. The activities associated with the £4.2bn worth of expenditure to deliver and complete the Thames Tideway Tunnel Project is referred to as the 'Project'. This is the Project the Secretary of State [has specified] in the Thames Tideway Tunnel Project Specification Notice.
16. Of this £4.2bn total, £2.8bn of expenditure (on the same "P80 & 2011 prices" basis described in paragraph 14) is expected to be undertaken by an IP once it is procured by TWUL and then designated and licensed by Ofwat, with the balance of the work being undertaken by TWUL. In practical terms this £2.8bn represents the higher risk tasks of building the main Tunnel and the connection shafts to the Combined Sewer Outflows, but not the work inside TWUL's existing infrastructure or other works that are preparatory to the main works. The precise arrangements will vary on a site by site basis to take into account the requirements of each particular site.
17. Including the whole of the £4.2bn of expenditure within the scope of the specified project is a practical step intended to contribute to the efficiency of the interface between TWUL and the IP. This is because the exact boundaries between the IP and TWUL are liable to change as the contractors refine the design of the Project. This construct allows sufficient flexibility to ensure that the party best able to carry out particular works can do so.

Extent of works included in the Thames Tideway Tunnel Project Preparatory Works Notice

18. Those elements which have a risk profile similar to TWUL's existing business are likely to be best delivered by TWUL. These elements amount to approximately £1.4bn of expenditure on the project, at P80 & 2011 prices excluding financing costs. TWUL will continue to undertake these subject to any changes arising from the detailed design work that is yet to be undertaken by future contractors.
19. The work set out in this Preparatory Work Notice covers this £1.4bn of expenditure so that TWUL can undertake that work, leaving the remaining £2.8bn of work to be delivered by an IP.
20. The split of the works associated with the Project is therefore around 66% for an IP and 33% for TWUL. This is considered the most practical and flexible way of ensuring that the project can start before an IP is procured, designated, licensed

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and operational meaning that there are minimal delays to the project so helping to keep its costs to a minimum.

21. The works for TWUL to undertake in the Thames Tideway Tunnel Project Preparatory Work Notice also have a very similar risk profile to the types of works which TWUL already undertakes e.g. in relation to land acquisition and supporting of its sewerage infrastructure. This means it is able to finance these works relatively straightforwardly, without the additional costs relating to the extra risks associated with deep tunnelling works.
22. TWUL will be able to commence a tendering process for contractors to construct the project's main works whilst separately commencing a tendering process for an IP. It is envisaged that this would then see a designated and licensed IP as the awarding body for the main works' construction contracts.

Rationale for issuing a Preparatory Work Notice

23. The Secretary of State is of the opinion that TWUL is best placed to undertake the preparatory work set out in the Thames Tideway Tunnel Project Preparatory Work Notice.
24. As the Secretary of State [has exercised] the power under regulation 4(1) to specify by notice the Thames Tideway Tunnel Project as an infrastructure project, then without this corresponding Preparatory Work Notice TWUL, as the incumbent undertaker, is prohibited from undertaking any works in relation to the specified project.
25. This corresponding Preparatory Work Notice permits or requires TWUL to undertake the preparatory works set out in the Thames Tideway Tunnel Project Specification Notice, including preparatory works that:
 - a) Are considered as preparatory "interface works" between TWUL's "normal" sewers and the IP's Tunnel, where a degree of flexibility and practical common sense is required in terms of enabling the construction of interfaces to a high technical standard to timetable so as to avoid any expensive delays.
 - b) Remove project risk from the perspective of an IP procurement, in particular (i) the application for and the obtaining of a Development

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Consent Order for the project; and (ii) acquiring interests in the land and property necessary for the construction of the project. To support these activities, it is necessary for TWUL to develop designs for the project to inform the Development Consent Order and site acquisition strategy, with such designs informed by extensive investigations, also undertaken by TWUL.

- c) Minimise the time to commence construction through the parallel procurement of both the IP and the IP's construction contracts. This entails TWUL commencing the procurement of the construction contracts for the works to be delivered by the IP (together with the associated design for tender activities) on behalf of the IP.
- d) Remove risk related to the proposed construction sites and avoid expensive project delays before an IP for the Tunnels is designated and licensed, for example by provision of power supplies, relocation of affected businesses and undertaking site investigations, utility diversions, preparation works.
- e) Enable construction efficiencies to be delivered. For example, infrastructure necessary to transfer the flows from the tunnel system pumping station to the inlet works of Beckton Sewage Treatment Works will be provided as part of the on-going Lee Tunnel contract. This infrastructure will require upsizing to cater for the increased flows associated with delivery of the TTT and it is more efficient to undertake such upsizing as part of the Lee Tunnel contract rather than at a later date once the IP has been designated and licensed.
- f) Minimise operational impact on TWUL sites. For example, an additional overflow tunnel is required to be constructed at Beckton Sewage Treatment Works as part of the project. However, this tunnel does not physically connect to the TTT or any other of the IP's assets and is to be undertaken entirely within the boundary of a TWUL operational asset, to which the IP requires no other access.

26. For these reasons this preparatory work notice ensures that the Thames Tideway Tunnel Infrastructure Project can proceed with minimal delay and so minimise any corresponding additional costs related to timing that could subsequently be passed onto customers.

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OVERALL CONCLUSION

27. Accordingly, for the above reasons and having regard to all other relevant considerations, the Secretary of State has decided to exercise the power in regulation 5(3) of the SIP Regulations and [has issued] the Thames Tideway Tunnel Project Preparatory Work Notice.

The Secretary of State for Environment, Food and Rural Affairs

Dated [to be inserted]

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