



## Water Services Regulation Authority (Ofwat)

# Comparative Study: Cost of new water supply connections work (Section 45 Water Industry Act 1991)

## Final Report - Public Version

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In 2016 we commissioned a new independent review of the costs of providing new water supply connections. The purpose of this review was to provide us with updated benchmark figures, currently on page 6 of this report, for the costs of providing a new water supply connection. We have published [a summary of the review](#), rather than the full report, because the report contains commercially sensitive information about water companies' costs. We will use this review to inform our consideration of the reasonableness of connection costs for disputes referred to us from the date of the summary. For disputes referred to us before the date of the summary we will continue to use the benchmark figures in this report.



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This report has been prepared for Water Services Regulation Authority (Ofwat) in accordance with the terms and conditions of appointment for Comparative Study: Cost of new water supply connections work (Section 45 Water Industry Act 1991) dated July 2009. Hyder Consulting (UK) Limited (2212959) cannot accept any responsibility for any use of or reliance on the contents of this report by any third party.





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# 1 SUMMARY

## Background

Ofwat receives a significant number of S45 disputes, referred often by customers who have requested a service pipe connection to replace an existing service, or for a small redevelopment such as turning a house into two flats. However, Ofwat is now also seeing larger developers seeking S45 determinations. Ofwat commissioned this project to support its determinations in these cases.

## Objectives

The objectives of this project were:

- To obtain an understanding and explanation of the variance in S45 contractor charges between Companies other than that based on market power to get better terms and rates from a contractor
- To compare Company contractor rates for new connections using both conventional open cut and moleing in order to obtain an understanding of what impact, if any, moleing has on the costs/charges for a new connection
- To obtain an understanding of what are reasonable costs/charges for materials (pipework, meters) and for reinstatement.

## Methodology

Ofwat identified ten Companies in which it would be beneficial to understand costs incurred for water connection works. The project team requested detailed information from the ten Companies.

Nine indicative scenarios were selected with a variety of surface types and service-pipe lengths. Contractor costs for these scenarios were compared.

## Results and Conclusions

All of the Companies appear to have procured new connections services by competitive tender, meeting EU rules. However every company had a unique approach to the procurement of new connections, so individual comparisons are not simple.

Whether contracts were let for new connections only, or as part of a larger repair and maintenance contract could not be shown to affect the costs.

Variance in contractor charges is not closely correlated to the extent of work included. Other factors are probably also important.

Moleing appears to give significant cost savings over open cut, where it is feasible, in most Companies.

Material cost could be identified for six of the ten Companies. Reinstatement costs could only be identified for one company.

There were two apparent high cost outliers in contractor costs. One of these was much the most significant outlier.

Comparison of costs of new connections to equivalent activities that were not recharged to a developer showed that in most Companies the costs were equivalent. However there is evidence that in part of the operating area of one company this may not be the case.

## 2 BACKGROUND

This report is in response to a request from Ofwat for consultancy to examine S45 costs levied by Water Companies ("Companies"). This requirement is in response to ongoing disputes referred to Ofwat by developers and customers.

Ofwat receives a significant number of S45 disputes, referred often by customers who have requested a service pipe connection to replace an existing service, or for a small redevelopment such as turning a house into two flats. However, Ofwat is now also seeing larger developers seeking S45 determinations. Ofwat requires information on which to base determinations in these cases.

This report only covers the charge that the contractor makes to the Company for the work carried out. This is referred to here as "contractor costs" or "cost". The scope of this project does not include the charges made by the Companies to the developers.

### 2.1 Objectives of the project

The objectives of the project are:

- To obtain an understanding and explanation of the variance in S45 contractor costs between Companies other than that based on market power to get better terms and rates from a contractor.
- To compare Company contractor rates for new connections using both conventional open cut and moleing in order to obtain an understanding of what impact, if any, moleing has on the costs/charges for a new connection
- To obtain an understanding of what are reasonable costs/charges for materials (pipework, meters) and for reinstatement.

## 3 METHODOLOGY

We have analysed real costs to enable Ofwat to challenge the Companies to explain anomalies in their costs. We carried out the following stages in a project to examine this issue.

### 3.1 Identify Companies to be investigated

Ofwat identified ten Companies for investigation. This included a mixture of Companies with significant numbers of complaints of high charges along with a number that did not.

### 3.2 Define, Request, Obtain and Collate data

We worked with Ofwat to precisely define the data required. We asked Ofwat to request the data from each of the Companies identified. In summary the data requested was in three parts:

- Part A: This is intended to obtain an understanding of how new connections services are procured and compare it to that for similar services.
- Part B: This is intended to provide quantitative data for analysis. This included a request for the unit costs of both new connections works carried out by contractors and the similar activities that were not recharged to developers.
- Part C: This section is intended to identify which activities are carried out by a contractor (or their subcontractor) for both new connections purposes and similar purposes (identified in Parts A and B) which are not recharged. The question lists the activities involved in providing a new connection and then requests information on which of those activities are carried out by contractors and are therefore included in the charges to the Companies.

#### 3.2.1 Clarification of information received

Several Companies provided incomplete returns from the information request or returns which prompted further clarification. In these cases further requests were made. Meetings were also held with some Companies to obtain clarifications. Further information was also obtained by phone call from several Companies.

### 3.3 Analysis

The analysis work included the following activities:

1. **Cost build up from components.** We listed all of the activities and materials associated with making a new customer connection for nine scenarios and used this to calculate the contractor costs from each company. These scenarios were single new connections from a 100mm main using open cut across three types of surface: verge, footway or type 3/4 road for three service pipe lengths: 2, 4 and 9 metres, including external boundary box. This produces a total of nine scenarios.
2. **Compare costs incurred by different water Companies.** We compared the costs incurred for the contracted-out elements of work by different Companies and related this to the extent of the work carried out by the individual Companies and the contractual arrangements used.

3. **Compare costs incurred by water Companies for similar activities that are not recharged to developers.** For each of these activities we compared the contractor cost to the cost for a new connection.
4. **Report costs of materials, reinstatement and moleing.** In those cases where material, moleing and reinstatement costs were available we reported these items separately for each of the scenarios.

## 4 RESULTS AND CONCLUSIONS

### 4.1 Range of Contractor Charges

The range of contractor charges for each of the nine scenarios is indicated by the table below, which gives lowest, highest and median charges for each scenario.

Table 1: Range of contractor charges

Surface:	Verge			Footway			Carriageway		
Service Length:	2.00 m	4.00m	9.00m	2.00 m	4.00m	9.00m	2.00 m	4.00m	9.00m
<b>Median</b>	£274.50	£312.14	£476.08	£394.79	£531.52	£765.00	£449.89	£587.00	£977.00
<b>Maximum</b>	£765.00	£765.00	£815.33	£925.78	£1,229.00	£1,987.05	£1,469.35	£1,885.45	£2,925.70
<b>Minimum</b>	£144.04	£144.04	£193.92	£203.92	£203.92	£278.42	£246.62	£246.62	£331.18

### 4.2 Variance in Contractor Charges

The variance in contractor charges was examined to take into account three issues:

- procurement,
- whether the new connections work formed part of a larger contract and
- The scope of work included in the contract.

These three items are dealt with separately below.

#### 4.2.1 Procurement

All of the Companies went to the market and all appear to have robust procurement methodologies that conform to the relevant European directives. This implies that the rates obtained were the market rates at the time of procurement.

Every Company had a unique approach to procurement of new connections, so individual comparisons are not simple.

#### 4.2.2 Connections work as part of a larger contract

In most Companies new development work is contracted out as a part of a larger contract that also covers other activities. There was one clear exception where developer services work is let as separate contracts. Where an equitable comparison could be made between this Company's cost rates for new connections and other Companies', they do not appear to differ markedly. Therefore we can say that there is no evidence, from the information we have, that separating out new connections from other work has a significant effect on the rates obtained from the market.

### 4.2.3 Scope of work included in the contract

There is a great deal of variation in the scope of work included in the contracts between the Companies and their contractors. We could not find a general linear relationship between the scope of work included and the contractor cost to the Company. The very lowest costs appear to correspond to smaller scope of work. The highest contractor cost does not correspond to the greatest scope of work included. One of the Companies with the greatest extent of work included also has some of the lowest contractor costs.

This indicates that most of the variance in contractor costs is not due to the extent of work included.

## 4.3 Impact of Moleing on costs for new connections

There are three different situations with respect to moleing.

- For most Companies moleing gives significant savings.
- For two Companies moleing is carried out at the contractor's risk for no change in cost.
- In two Companies moleing has a higher cost, and in one of these the difference is significant, although there may be savings in traffic management that are not clear from the simple scenarios examined.

Overall it appears that for most Companies moleing can deliver significant cost savings.

In spite of the apparent potential saving from moleing, its applicability is severely limited by ground conditions.

## 4.4 Costs and Charges for materials and for reinstatement

The data on cost of materials is not complete. However the data that we do have from six companies appears to produce a consistent result. The cost data for reinstatement is limited.

## 4.5 Outliers in Contractor Costs

There are two high cost outliers across the indicative scenarios. One of these is a much more significant outlier than the other.

## 4.6 Cost of similar activities that are not recharged

Most of the Companies used the same contract, contractor and unit costs for new connections as they did for similar activities that were not recharged.

One Company stands out as an exception in that completely different contracts are used for new connections and the similar activity. It appears that the costs of similar work using the two contracts in this Company are not equivalent for some parts of their operating area.