thirdhorizon
Consulting Partners

Wales & West Utilities (WWU)

Direct Cost Review

18 April 2007

Contents

Introduction

This document presents the results of a review carried out by Third Horizon Consulting on a report issued by Parsons Brinckerhoff Ltd and Rune Associates (PB Rune) entitled: GAS DISTRIBUTION PRICE CONTROL REVIEW, FIVE YEAR CONTROL, (OPEX) DRAFT REPORT 1, WALES AND WEST NETWORK. (the report)

The review was undertaken on behalf of Wales and West Utilities (WWU) and was carried out during the period 5 March 2007 to 13 April 2007. The objective of the study was to examine the approach and methodology used by PB Rune and to assess the validity or otherwise of the conclusions drawn in the report. As well as analysing the contents of the report itself the work involved making comparisons with WWU's BPQ submissions and accessing external, independent benchmark data. No direct research was carried out with other UK Gas Distribution Networks (GDNs).

This document should be read in conjunction with the output of the following other studies:

- **"Network Cost Drivers, A bottom up Approach" – by John Spiller Associates**
- **"Review: Reports on Costs, A PBP/RA Report for West and Wales Utilities" dated 10 March 2007 – by Nera Economic Consulting**
- **"Support Services Review" dated 18 April 2007 – by Third Horizon Consulting**

It is expected that this document will form part of WWU's response to Ofgem in connection with the five year price control review 2008 – 2013.

Executive summary

1. The general approach used by PB Rune has been examined by Nera Economic Consultants. It was found to be flawed and depends on a series of unjustified and unsubstantiated assumptions. This study has therefore focussed on WWU's overall direct cost base.

2. WWU's direct costs were forecast to be some £68.8 million in 2006/7, based on WWU's BPQ submission to Ofgem. The format of this is identical to the projections for 2008/9 to 2012/13 which were used as the basis for PB Rune's analysis. PB Rune made adjustments to the figures to "normalise" them for transfers between categories and to conform to Ofgem policy. No validation has been made in this study as to the appropriateness or otherwise of these adjustments.

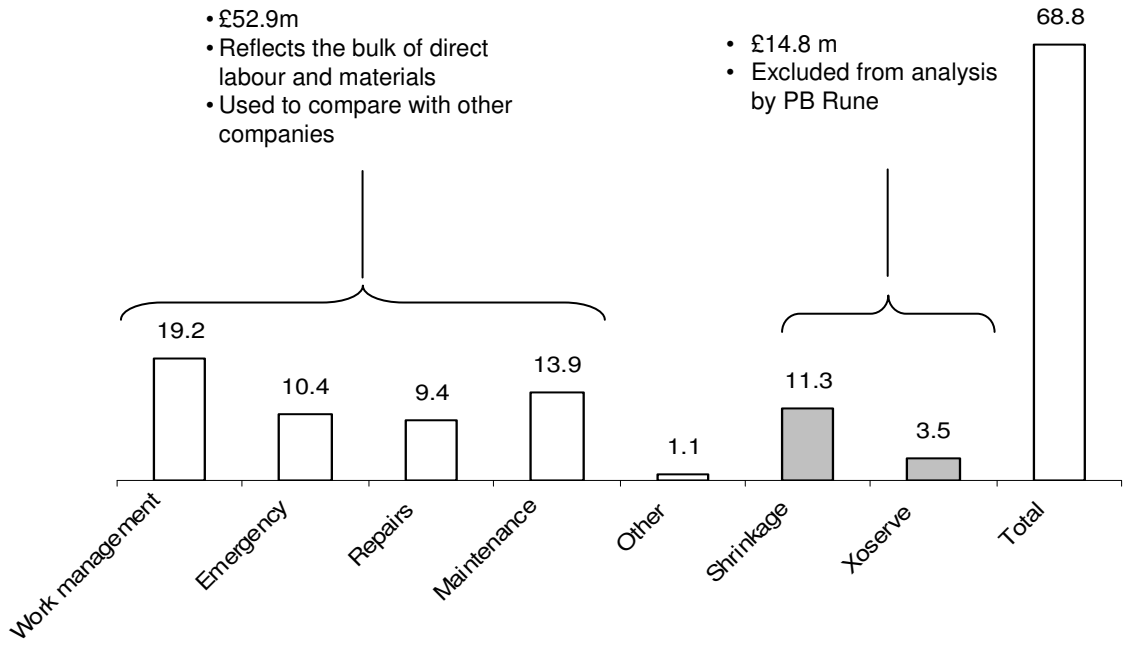
3. Evidence from a study of UK water companies indicates that there is a linear relationship between total direct costs and the organisation's size. The analysis in this document indicates that:

    a. Based on a comparison with UK water industry the two smallest independent GDNs are shown to be strong performers across a number of total direct cost measures
    b. When the penalty costs associated with the unique characteristics of the WWU network are considered this situation is further improved
    c. Furthermore, when WWU is compared to a portfolio of US gas distribution companies the direct cost per km of pipeline of WWU approach that of the first quartile
    d. Similar benchmarks for the UK water industry again show WWU approaching first quartile performance
    e. Comparing WWU's total adjusted direct costs with the other GDNs on the basis of unsculpted RAV and Km of network shows WWU as the frontier performer.

4. Acknowledging that WWU is already demonstrated as approaching upper quartile performance across a portfolio of external comparators and is shown as the leading GDN, it is considered that the cost reductions implied by the PB Rune report are unjustified and unrealistic.

Direct operating costs

Total direct costs in 2006/7 are forecast to be £68.8 m before any normalisation adjustments



- **Costs based on BPQ submissions to Ofgem relating to 2006/7**
- **All figures in 2005/6 values**
- **PB Rune analysis based on projections for 2008/9 to 2012/13. These were apparently based on 2005/6 actuals informed by the 2006/7 forecasts**
- **The figures submitted on the BPQs were adjusted by PB Rune to "normalise" them for transfers between categories and to conform to Ofgem policy. The benchmarking carried out in this review has been performed on the actual figures, before any normalisation and including pension costs**

Effect of size on direct costs – Our Approach to assessing the impact

We have used third party information to demonstrate the relationship between scale and direct costs in the Utilities sector. We have then applied GDN data to re-evaluate each GDN's relative position in terms of efficiency.

Step 1.

1. Demonstrate the relationship between scale of operation and direct cost in the utilities sector using information from studies carried out in the UK water industry
2. Size represented separately by revenue and network length

Step 2.

- Establish graphically the relationship between direct costs and size

Step 3.

- Plot the equivalent data for the GDNs on the same scale
- Use this to demonstrate the more appropriate relative positioning of the GDNs in terms of efficiency of total support cost

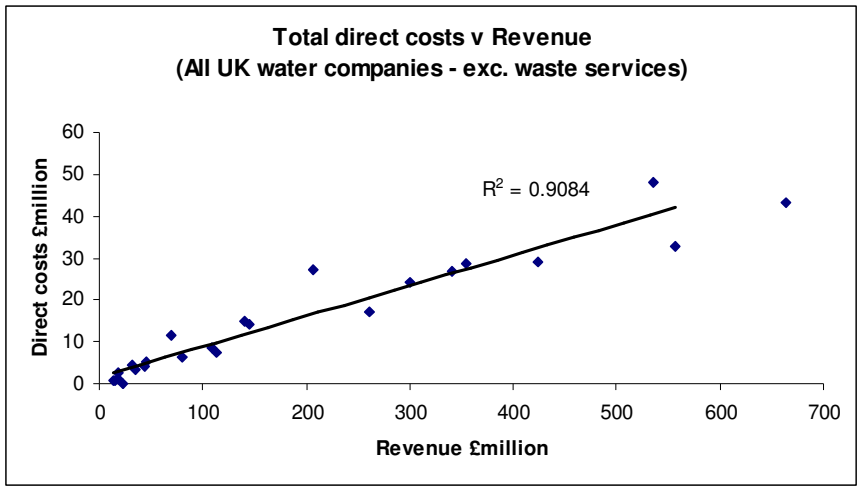
Result.

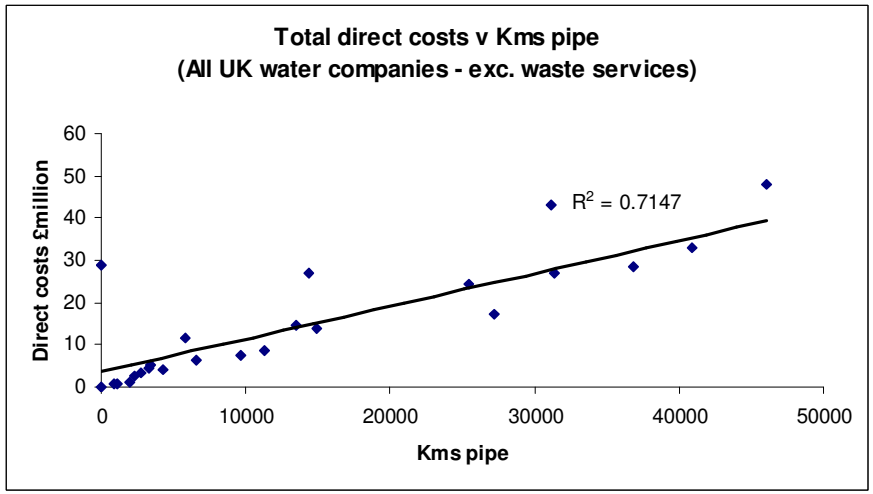
- Illustrates that the relationship between size (represented by revenue and kms of network) and direct costs is linear.
- PB Rune's "ranking" of GDNs in terms of efficiency is misleading
- WWU compares favourably with first quartile performance in both the US gas and UK water industries.
- In overall terms WWU and NGN are shown to be the most efficient network operators

Source: LECG Report Extract

Total direct costs – UK Water Industry

Analysis of the UK Water Industry demonstrates a linear correlation between direct costs and company size.





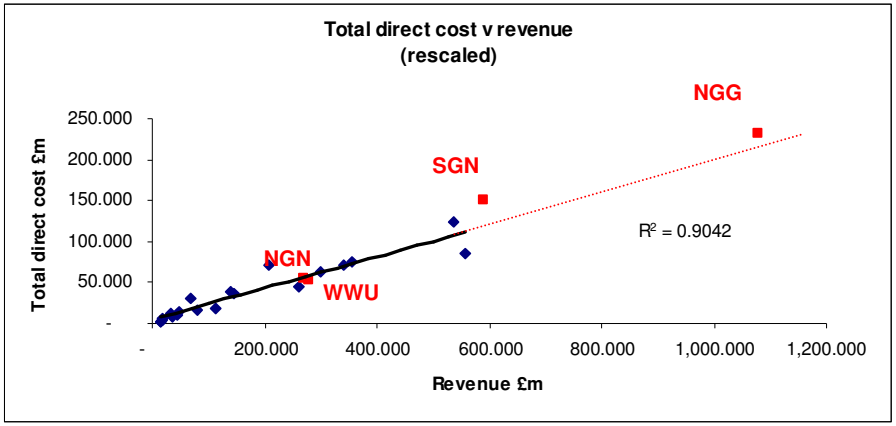
Summary

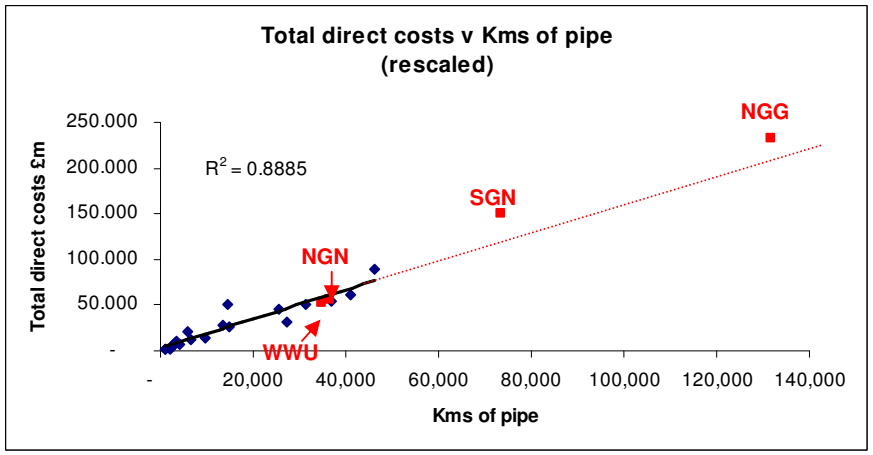
1. **Comparison of direct costs reported by 23 UK water companies in 2005/06**
2. **Size represented by two proxies – revenue and network length**
3. **Shows a linear correlation between direct costs and size,**

Source: Third Horizon research data 2006

Total direct costs – UK Water Industry

Overlaying the GDN structure provides an indication of relative efficiency



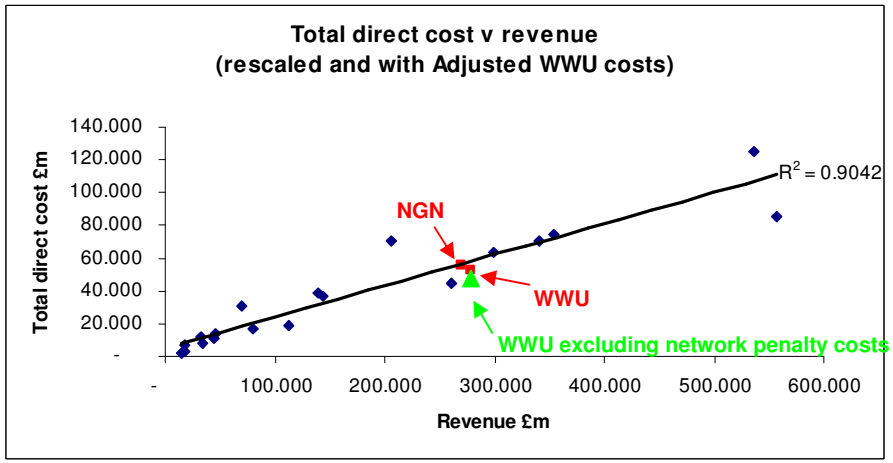


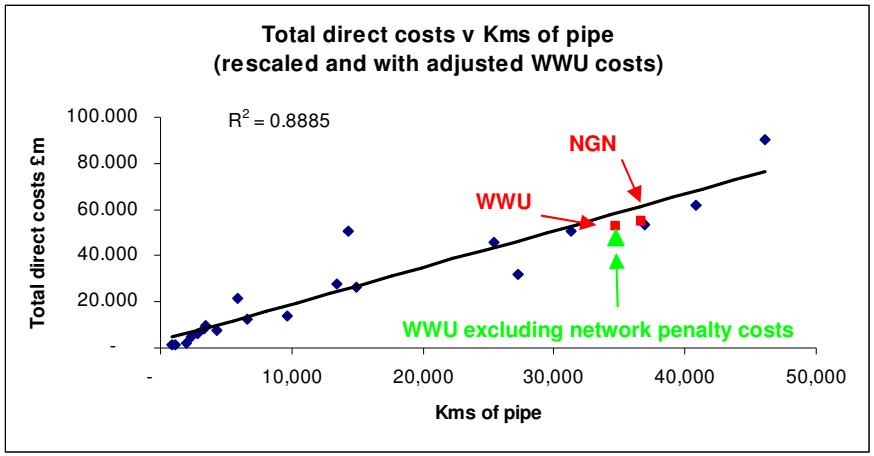
Summary

1. **Scale resized to accommodate GDN data but preserving the same relative relationships**
2. **GDN direct costs exclude shrinkage and Xoserve but include actual pensions cost**
3. **Revenue based on unsculpted RAV**
4. **Relative efficiency shows that WWU (together with NGN) is a best in class performer.**

Total direct costs – UK Water Industry

When the penalty costs of WWU's network are excluded WWU's relative performance is still better



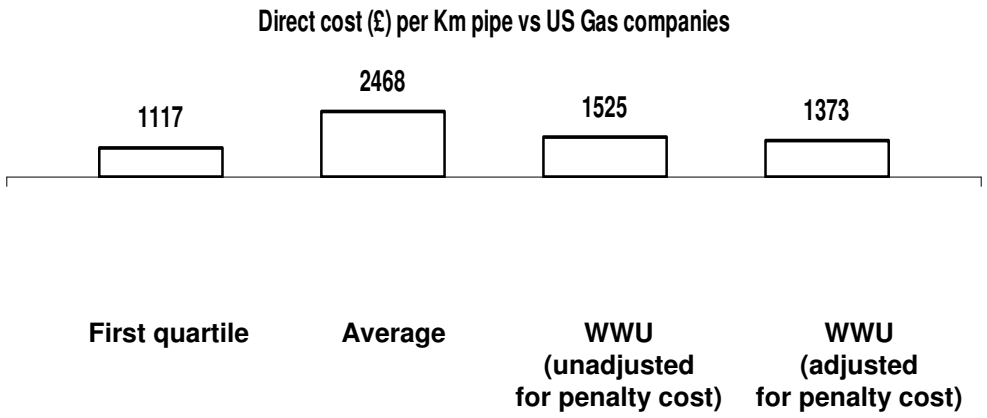


Summary

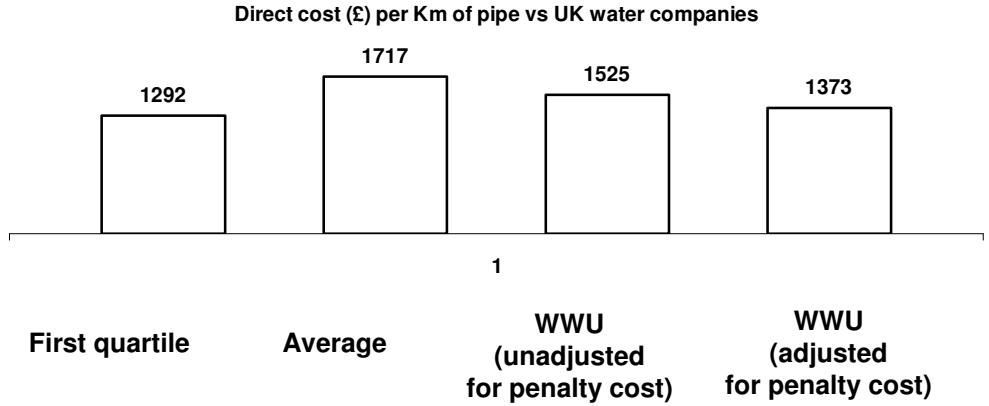
1. **WWU incurs penalty costs of about £4.62 m p.a. due to it's unique shape, size, customer density and network configuration**
2. **When these exceptional costs are eliminated WWU's performance is seen to be leading edge**

Direct cost comparison – How WWU compares with other utilities

Comparing direct costs with other utility companies indicates WWU is a strong performer



Source: Third horizon research 2002



Source: Third horizon research 2006

Summary

1. Comparison with data from 142 US gas companies and 22 UK water companies
2. Costs include work management, emergency, repairs and maintenance
3. US data adjusted for:
    1. Exchange rates
    2. Inflation
    3. Labour rate differences
4. UK data adjusted for inflation
5. WWU figures shown at full value and adjusted for penalty costs due to network shape and size

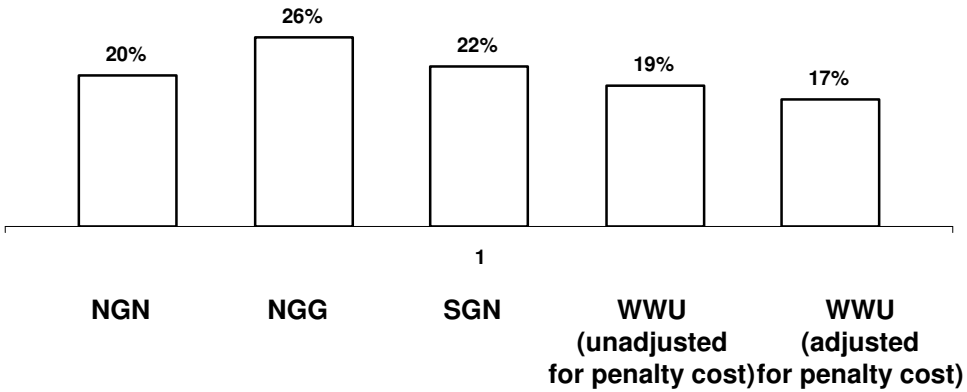
Note

These benchmark comparisons are directional only. The data provided by the comparator organisations may not have been provided in exactly the same format as specified by Ofgem in respect of the GDNs

Direct cost comparison – How WWU compares with other GDNs

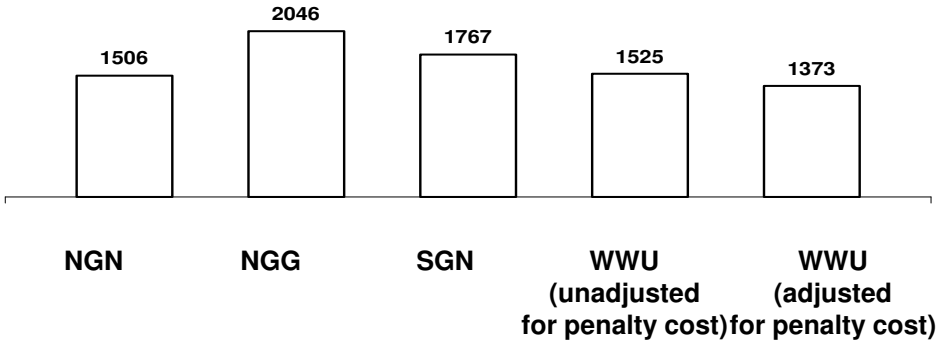
Comparing direct costs with other GDNs indicates WWU is a strong performer

Total direct cost as % of unsculpted RAV



Source: GDN BPQ submissions

Total Cost (£) per Km vs other GDNs



Source: GDN BPQ submissions

Summary

- WWU compares well with other GDNs in terms of overall direct costs expressed as % of revenue
- On a cost per Km of pipe comparison WWU is significantly better than most GDNs

Source: Benchmark Economics 2003