



RIIO-GD1 Business Plan 2013-2021

Part B4

Business Plan Uncertainties

This paper forms part of Wales & West Utilities Limited Regulatory business plan 2013 - 2021. Your attention is specifically drawn to the legal notice relating to the whole of the business plan, set out on the inside cover of The Executive Overview (Part A) of the business plan This is applicable in full to this paper, as though set out in full here.

Except where stated to the contrary, all financial values within this paper are stated in 2009/10 prices, inclusive of 1% efficiency and prior to real price effects. This is in order that they match the figures used within the detail of the Business Plan Data Template.

This is a redacted copy. We do not indicate where material has been redacted.

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1. Introduction

This document sets out our proposed mechanisms to address the risks and uncertainties associated with the delivery of our business plan within the new RIIO-GD1 regulatory framework for the eight years, April 2013 to March 2021.

A key part of a price control settlement for consumers and the regulated business, is the perceived risk profile of the settlement. There must be an appropriate balance of risk between networks and consumers.

The proposed cost of equity and therefore our weighted average cost of capital (WACC) is based on assumption that Ofgem and stakeholders accept the uncertainty mechanisms contained within this document.

Any discussions that alter the proposals contained within this paper would clearly change the risk profile of the business plan and hence impact the proposed cost of equity and therefore the WACC, and risk sharing proposals (the Information Quality Incentive (IQI) rate).

2. Executive summary

This document sets out our proposed mechanisms with supporting evidence to address the risks and uncertainties associated with the delivery of our business plan within the new RIIO-GD1 regulatory framework for the eight years April 2013 to March 2021.

Our risk analysis has highlighted a continuation of existing risks and uncertainties, coupled with new and significant uncertainties that we and our consumers will face over the next decade and beyond. These new uncertainties largely occur as a result of three factors:

- The new RIIO Regulatory framework.
- The uncontrollable actions of others that will drive:
 - Additional volumes of work,
 - New activities,
 - Additional costs.
- Market conditions that will impact the costs of resources we use.

In most areas our proposals align to the recommendations contained within the Ofgem document “Decision on Strategy for RIIO-T1 and RIIO-GD1” published in March 2011.

In some areas we propose alternative mechanisms which we believe provide a greater visibility of costs to consumers and a better balance of risk between consumers and ourselves. The key alternative mechanisms are:

- A more flexible and sustainable approach to addressing uncertainties:
 - The longer price control period increases the likelihood of significant change and therefore we will need to be more flexible to avoid onerous administration.
- An alternative proposal for funding the emergency service:
 - Our proposals would fund the efficient cost of providing the emergency service and incentivise networks to source alternative work.
- Proposals to address the impact of Smart Metering on consumers and networks:
 - Our plan is develop innovative commercial arrangements with Suppliers to minimise the cost of the Supplier led Smart Meter rollout.
- The inclusion of forecasted street works costs:
 - Based on significant engagement with our local highway authorities we have been able to include forecast costs that will give consumers greater visibility of costs. Any underspend or overspend on these costs will be subject to the annual sharing mechanism with consumers. We will also require a re-opener mechanism to fund future unknown costs to comply with any legislation development or change.

3. Overview

Our business plan covers the eight years, April 2013 to March 2021. The proposed cost of equity and therefore the weighted average cost of capital (WACC) is based upon an assumption that Ofgem and investors accept the uncertainties contained within this document.

Any discussions that alter the proposals contained within this paper would clearly change the risk profile of the business plan and hence impact the proposed cost of equity and therefore WACC, and risk sharing proposals (the Information Quality Incentive rate).

The key principles that underpin our approach to managing uncertainty within our business plan are:

- We accept that we will continue to bear the appropriate level of operational risk that is largely within our control.
- Our stakeholders have told us that they would like as much visibility as possible of the costs to them. Therefore, where possible, we will include our forecasted costs in our business plan submission based on detailed research.
- Appropriate risk sharing arrangements between consumers and investors, for those elements that we can control.
- Networks must be entitled to recover the efficient costs incurred to meet our Licence and legal obligations as well as the stakeholder required outputs.
- To avoid a disproportionately high cost of equity and hence cost on consumers, we have included appropriate protection for material uncontrollable uncertainties.
- A longer review period will require more flexibility in funding to deal with increased uncertainty.

Structure of the rest of this document:

Within Section 4 we highlight the additional risks and uncertainties of the new RIIO regulatory framework.

Section 5 provides a summary of the factors that influence the uncertainties, our key principles that underpin our approach and the proposed uncertainty mechanisms.

Sections 6 to 10 highlight the identified specific uncertainties faced, and provide further detail on the source and options considered for each.

4. The New RIIO Regulatory Framework

The next price control period covering the eight years from April 2013 to March 2021 will be the first time that Gas Distribution Networks will be subject to the new RIIO principles.

We have not identified any reductions to the existing uncertainties and risks that currently exist. There are some key new risks and uncertainties associated with a significant change from a proven regulatory framework to the new, untested RIIO framework.

In this section we briefly outline the additional key risks and uncertainties specifically associated with the change in the regulatory framework to “RIIO”.

We believe the proposals contained within our business plan for dealing with these uncertainties represent a balanced approach to appropriately share the additional new risks and uncertainties.

4.1. A new regulatory regime

Consumers, investors and networks have worked under the tried and tested RPI-X regime that has evolved successfully over the last twenty years. It is recognised that RPI-X has delivered value for money but we accept that a more stakeholder focused, output based form of regulation may be required to meet the future challenges.

We fully support many of the RIIO principles but there is a realisation that it is new and therefore untested and that it will take time to evolve into an established regime. It will be some years before we can assess the success of RIIO but we believe everyone recognises that such a fundamental change to a well established regulatory regime brings additional risk compared to the current status quo regime.

It is also generally recognised that this fundamental regime change is being implemented during one of the most uncertain economic periods in our history, coupled with an uncertain future energy mix.

4.2. The 8 year price control period

Cost allowances are currently set for a period of five years. The move to an eight year period clearly increases the likelihood of new unforeseen costs and material changes to existing costs and therefore broadens the range of potential cost variations. Without adequate uncertainty procedures, this results in a more volatile framework for networks and consumers. This point is recognised in the recent publication by Standard & Poors ‘How the Proposed RIIO Regulatory Framework Could Affect Ratings on U.K. Energy Utilities’

“In our opinion, the longer period of price control may support credit quality because of longer-term predictability and lower reset risk--but only if the model gives sufficient flexibility to re-open the price control should costs increase beyond the regulator's expectations due to factors outside a company's control.”¹

¹ Standard & Poors September 13th 2011 How The Proposed RIIO Regulatory Framework Could Affect Ratings On U.K. Energy Utilities

In addition, Fitch have also commented in their publication '2011 Outlook: UK Utilities' particularly in respect of the extension of the price control.

"If the price control period is extended and there are no other changes to the regulatory regime, then this clearly increases credit risk."

4.3. Stakeholder required outputs

A key principle of RIIO is to link total controllable network cost allowances, known as "totex" to stakeholder required outputs. We are supportive of this principle and are fully engaged with Ofgem and other industry participants to develop robust, sustainable outputs. We are, however, mindful that the use of "totex" and definition of outputs across the sector is in its infancy and the link of outputs to "totex" costs is yet to be tested. It is clear that costs of delivery and output expectations from stakeholders will evolve over this first "RIIO period".

4.4. The mid point review

Regulatory commitment and consistency from Ofgem will be a key success factor for the new RIIO regulatory framework as it has been for the previous RPI-X regime.

The midpoint review of Outputs that will take place within RIIO-GD1 will be the first review of the newly defined Outputs, and this first review could have a material impact on the costs and outputs for the last four years of the settlement period.

Ofgem has set out a "narrow" scope for the midpoint review but until the review has taken place, it is difficult for anyone to predict or quantify the scale of its impact. Therefore there is significant uncertainty associated with a midpoint review for both consumers and networks.

There is also a risk that the scope of the midpoint review could expand resulting in more uncertainty for consumers and networks.

4.5. The funding of network costs over a longer time frame

Ofgem has indicated that a significant portion of network costs, known as "Replacement Expenditure" will now be funded over 45 years compared to the current funding method that allows funding of half of these costs in the year of costs incurred. This significant change introduces additional funding risks for networks and highlights the risk of regulatory inconsistency over the longer term. We plan to utilise transitional arrangements to mitigate the impact of this significant change.

4.6. Summary

We are supportive of many of the RIIO principles. We fully support greater engagement with stakeholders and the linkage of network performance to the delivery of outputs. However, a fundamental change in the regulatory regime from an established framework to a new, untested regime introduces additional risks for all parties. We believe, the RIIO framework must recognise this change in risk and provide adequate returns for investors as well as protection and flexibility for networks and consumers in order to ensure its sustainability over the longer term. The introduction and application of the RIIO principles for the first time will increase risk and therefore does need to be reflected in the equity returns to investors.

5. The Future Uncertainties and Proposed Mechanisms

This section summarises our proposed mechanisms where they differ from those proposed by Ofgem in their March 2011 Strategy Decision documents². We have summarised the influencing factors alongside the key principles that underpin our approach. Sections 5 to 9 detail, by output category, the specific uncertainties identified at this time.

Our adopted approach is efficient for consumers, sustainable over the longer term and transparent for all parties. It provides a balanced risk allocation between us and consumers.

5.1. Influencing factors and key principles

Our analysis has identified that future uncertainties largely occur as a result of three factors:

- The new RIIO Regulatory framework.
- The uncontrollable actions of others that will drive:
 - Additional volumes of work,
 - New activities,
 - Additional costs.
- Market conditions that will impact the costs of resources we use.

The key principles that underpin our approach to managing uncertainty within our business plan are:

- We accept that we will continue to bear the appropriate level of operational risk that is largely within our control.
- Our stakeholders have told us that they would like as much visibility as possible of the costs to them. Therefore, where possible, we will include our forecasted costs in our business plan submission based on detailed research.
- Appropriate risk sharing arrangements between consumers and investors, for those elements that we can control.
- Networks must be entitled to recover the efficient costs incurred to meet our Licence and legal obligations as well as the stakeholder required outputs.
- To avoid a disproportionately high cost of equity and hence cost on consumers, we have included appropriate protection for material uncontrollable uncertainties.
- A longer review period will require more flexibility in funding to deal with increased uncertainty.

² Decision on Strategy for the next transmission and gas distribution price controls RIIO T1 and RIIO-GD1 uncertainty mechanism – Ofgem March 31st 2011

5.2. Proposed uncertainty mechanisms

The March 2011 strategy documents published by Ofgem³ recognised the three factors highlighted above and Ofgem proposed mechanisms to address the uncertainties. In most areas we support the Ofgem mechanisms but there are key uncertainties where we think alternatives provide a more efficient solution for consumers and a better allocation of risk between networks and consumers. Our proposed approach is:

- For known current or future operational costs within the control of the networks, variations to base allowances (positive or negative) will be shared with consumers using the annual sharing mechanism as detailed by Ofgem in the March 2011 Strategy document. This is known as the “Information Quality Incentive mechanism”. The vast majority of network costs fall into this category. This is a significant change to the current sharing mechanisms where sharing takes place after the end of the existing five year control period.
- In relation to the costs of providing the Emergency Service we propose a risk sharing mechanism that incentivises networks to sustain further alternative work and also results in consumers paying less than the full cost of the emergency service.
- We propose a continuation of the existing pass through arrangements for Business Rates, Ofgem Licence fee, NTS pension deficit funding, Shrinkage gas prices and National Transmission prices.
- For new activities with uncertain future costs beyond our control and dependent on the actions of others, we have undertaken significant research, consulted widely with relevant parties and included our latest forecast costs within the business plan submission based on our evidence. Within our business plan we have included spend associated with the following activities:
 - Impact of the supplier led smart metering rollout programme,
 - Future Street works costs including lane rental and permit schemes,
 - Costs associated with the impact of compliance to the “Centre for protection of National Interest” (CPNI).
- For future unknown activities/costs driven by events outside of the network control we propose a broad re-opener that allows a network to claim for efficiently incurred costs that are necessary to comply with legislation, industry commercial arrangements and Licence obligations. The re-opener would be triggered when the cumulative sum of such costs exceed 1% of core average annual Allowed Revenue. Networks would be funded to put them in a Net Present Value neutral position compared to an ex-ante allowance for the necessary and efficient costs incurred. Current examples of costs that may fall into this are:
 - Costs to comply with future Environmental Legislation,
 - Costs to comply with any change imposed by the Health and Safety Executive,
 - Costs to comply with changes to the commercial arrangements imposed on the distribution networks by the National Transmission System Operator,

³ RIIO-GD1 Strategy documents published by Ofgem March 2011

- Costs incurred to connect large loads to the gas network. This would include costs to enable a large load to take gas from the network and costs for a large load to put gas into the network.

5.3. Proposed uncertainty mechanism to efficiently fund the costs of the Emergency Service

It is important that networks are held accountable for key licence obligations; and efficiently funded to comply with these licence obligations. Establishing the efficient level of funding for each network is not straight forward as there are fixed costs and network specific factors related to the provision of an emergency service. It would be inappropriate for Ofgem to set allowances based on simple regressions that do not fully reflect the costs of providing the licence obligations as explained below.

Currently consumers do not pay the full cost related to the provision of an emergency service. The cost is subsidised by networks' ability to win meter contracts and their resulting ability to attribute costs to meterwork. Without this alternative, competitively tendered work, consumers would need to fund the additional costs that relate to the provision of an emergency service. Ofgem has recognised the risks of loss of meterwork with the provision of a "Meter tipping Adjustment mechanism" in GDPCR1. In simple terms, this mechanism recognises the benefits to consumers of the meter work but provides partial additional funding to cover the necessary increase in emergency costs, should networks lose this work.

The Ofgem proposal for RIIO-GD1 is to discontinue the meter tipping scheme and for networks to submit the full efficient cost for providing the emergency service. We think this approach may result in increased costs to consumers compared to our proposal.

In our business plan we have included the benefit to consumers of the competitively won existing metering contracts. For a period of time within RIIO-GD1 these contracts will provide a subsidy to the full cost of the emergency service. As volumes of work under these contracts decline, due to the smart meter rollout.

Our proposed approach is to fully allow the efficient gross cost of the Emergency service, before any subsidy from other activities such as metering, within RIIO-GD1. The Information Quality Incentive would then operate to encourage GDNs to find infill work in order to reduce the "net" cost of the emergency service. Under the Information Quality Incentive for RIIO-GD1 any outperformance of the allowed emergency cost, as part of the Totex regime, would be shared between consumers and the GDNs. This is our proposed approach.

The continuation of the existing meter tipping adjustment is an appropriate alternative where networks still have metering contracts with major Meter Asset Managers.

The supplier led smart meter rollout programme will eliminate the opportunity for networks to defray costs unless a future innovative commercial solution between suppliers and Networks is developed. We want to explore this option but currently most suppliers are not in a position to discuss this with us as their own internal plans are not sufficiently developed.

5.4. Proposed funding for Smart Meter work

The Government has announced that all domestic homes will have smart gas and electric meters by 2020. This will mean every existing gas and electric meter will be exchanged to a smart meter by suppliers by 2020. Within our network 2.5 million gas meters will be exchanged. If the programme starts in 2014, as expected, then 400,000 gas meters per annum will be changed across our geography each year. This activity level is almost four times the level of our current emergency workload.

Recognising this huge programme within our network we have carried out a unique and comprehensive survey of existing meters across our geography, engaged the large suppliers and distilled the results into expected workloads and costs over the current and subsequent RIIO-GD1 period. We have also shared the results of our research with the Department Of Energy and Climate Change (DECC) led industry Smart meter workgroups with the aim of finding a commercially practicable, cost effective solution for the benefit of consumers.

We have included a pragmatic view of the costs within our business plan. Our analysis, supported by the evidence of the only large supplier to have carried out any detailed field analysis, suggests that in approximately 28% of smart meter installations, Network intervention will be required.

For us to support the supplier led smart meter rollout there are costs that we will incur regardless of rollout volumes. In addition, there will be costs that will vary and the level of actual cost incurred will be dependent on actual workloads delivered by our workforce.

Therefore, In our business plan we have included forecast costs that will allow us to support the smart meter rollout programme, that are of a relatively fixed nature (e.g. training and back office costs) and also the costs, based on anticipated volumes of jobs that we would be required to attend and action.

In summary, we propose an ex-ante allowance based on our detailed research and a volume driver that will adjust the variable costs to actual workloads delivered.

We will continue to engage Ofgem, DECC and suppliers and are willing to seek innovative commercial arrangements with Suppliers to help minimise and mitigate these extra costs to consumers. Early discussions have highlighted that many suppliers are simply not ready to engage with us in this area.

An alternative solution is to allow a re-opener mechanism but we believe our robust analysis and industry engagement supports inclusion of the ex-ante allowance. The drawback of a re-opener compared to an ex-ante allowance would be a substantial cost shock to consumers part way through RIIO. On balance we believe our proposal will provide the most appropriate solution for consumers.

5.5. Summary of our approach and justification of our proposals.

We have outlined our key principles, and we think our proposals are aligned to these and also fit well with the RIIO regulatory framework.

We have considered a regime with no uncertainty mechanisms to address future uncontrollable costs but given the potential impact of the known non-controllable uncertainties out to 2021, this would represent an unacceptable level of risk to the network investors. To mitigate this option, the high level of equity return required would be completely disproportionate for consumers to fund.

We have also considered incorporating a list of specific logging up and/or re-opener windows to address each and every potential uncertainty. Given the longer price control settlement period, the range of possible uncertainties and the potential for different scenarios, it is highly likely that a list would need to change over time. Where the list did not include a new unforeseen uncertainty, then an unnecessary re-opener and redraft of the Licence would be required. We believe this approach would be impracticable and overly burdensome for all parties.

Therefore, we believe a more balanced and flexible approach as outlined in section 5.2 above is aligned to our principles and those contained within the RIIO framework. We also believe our approach would be sustainable over the longer term and provides the most appropriate risk sharing treatment between Networks and consumers.

For completeness, sections 6 to 10 of this document outline our analysis of identified specific uncertainties associated with the delivery of each output category out to 2021. In many instances our proposals align to the Ofgem proposals. For each of the specific uncertainties we state how we have dealt with them within our business plan submission.

6. Safety and Reliability

Section	Uncertainty	Description of uncertainty	WWU proposed uncertainty mechanism	Allocation of risk
6.1.	National Transmission Exit capacity charges	National Transmission System costs will be charged to networks. Networks cannot control the "rates" charged to each network	Ex ante allowance for each year based forecast volumes. Revenue driver that allows pass through of National Transmission System prices	Networks face volume risk and are incentivised to beat volume targets
6.1.	Change to the commercial arrangements with National Transmission System	Potential changes to National Transmission System costs charged to networks that Networks cannot control	A re-opener if there is a change to National Transmission System /Distribution Network commercial arrangements which increases Distribution Network costs not identified at RIIIO-GD1	Networks should not be exposed to the impact and changes implemented by the National Transmission System. Consumers must not be penalised in overall terms between Transmission and Distribution
6.2.	Changes to peak gas demand	A material change in peak demand can significantly impact the cost to provide transportation capacity for consumers	A logging up if there is a change to peak demand which increases costs by more than 1% of allowed revenue	Networks exposed to reasonable changes in demands, but protected against significant change which it has no control over such as a large load connection
6.3.	The cost of the emergency service to consumers. Currently this is subsidised by our ability to carry out competitive meterwork	Funding level required to provide the emergency service	Ex ante allowance of full cost of emergency with a sharing mechanism equal to the Information Quality Incentive rate to reflect any commercial metering contracts won. Further work with Suppliers to explore Smart Meter options	The efficient costs of an emergency service should be funded
6.4.	Emergency - 12 hr rule	If HSE change their current position on the strict application of the 12 hr rule networks will require significant additional costs to fulfil Licence obligations	A re-opener up to fund efficient additional costs as a result of a change in the application of the 12 hr rule by HSE.	The enforcement by the HSE of the 12hr rule is outside of our control, so we should be protected from this.
6.5.	The costs of delivering the replacement programme can vary significantly dependant on workload mix	Changes to costs of replacement work due to diameter mix variation from that anticipated in allowance	Ex ante allowance for WWU forecast costs. For Tier 2 below threshold & Tier 3 mains a volume driver to adjust for work mix variations. Price variations subject to Information Quality Incentive sharing. This is aligned to the Ofgem proposals	Networks to be funded for obligations. Networks and consumers protected against work mix variations. Networks incentivised to deliver efficient spend
6.5.	Replacement Policy	Changes to costs of replacement due to a change in HSE direction or policy	Ofgem has signalled an ongoing HSE review of replacement policy. If this happens then a re-opener mechanism will be required to reflect the policy changes. This is aligned to the Ofgem proposals	Networks to be funded for obligations and consumers to be protected against major change

6.1. Payments to the National Transmission System operator

6.1.1. Summary of WWU business plan treatment

- We have included the forecast costs of managing our capacity requirements within known industry commercial arrangements. The commercial arrangements are always subject to change and it is important that consumers and networks are not disadvantaged as a result of any change in arrangements between Transmission and Distribution. Our business plan includes significant payments to the National Transmission System Operator (NTS) for existing National Transmission System products and services. The current forecast of payments to the National Transmission System Operator is approximately £20m per annum based on existing charge rates from National Transmission.
- For known, non controllable costs that may vary, we propose annual pass through adjustments to fund actual costs. An example is the rate charged by NTS for Flat capacity.
- For future unknown costs, we propose a re-opener mechanism for future potential uncontrollable, material events relating to NTS charges.

The following paragraphs address each area of providing capacity outputs.

6.1.2. Availability and costs of system pressures, firm and flex capacity products from the National Transmission System

Our ability to transport gas is uniquely dependent on the availability and cost of National Transmission System products and services. Currently the intention is for GDNs to pay National Transmission System for the Flat Capacity product. Evidence to date suggests that the charges can vary significantly. Under the existing commercial arrangements, there is no cost to distribution networks for "System Pressures" or "Flex products" from the National Transmission System.

In addition, the National Transmission System "guarantees" firm/flex and system pressures forward for a period of 6 years based on the current demand levels. If we request an increase to our firm, flex and/or pressures then the current process is to discuss with National Grid National Transmission System and establish how the requirement can be met for the next 3 years at least, which will allow us time to invest in our network if it is not available after this time. National Transmission System can and have previously declined increases to firm, flex and pressures after this 3 year period. As part of the current annual planning process, National Transmission System can request GDNs to reduce pressures which we would be required to consider.

The introduction of a longer price control period significantly increases the risk to the GDN in terms of future network reinforcement being required, as a result of uncontrollable changes to the availability, and/or cost of National Transmission System system pressures, firm and flex capacity.

It is therefore important that we have:

- An ex-ante allowance to pay National Transmission System for exit capacity that is based on ex ante volume baselines for each year coupled with forecast National Transmission System prices. The outturn Allowed Revenue for each year then needs to be adjusted to reflect the outturn National Transmission System prices.

- A re-opener mechanism that will allow adjustments to Network expenditure if there is a change to any of the National Transmission System products and services that would result in material, additional, efficient Distribution Network costs not allowed as part of the RIIO-GD1 settlement. Once incurred, the expenditure should be allowed in following years GDN allowed revenues.

6.2. Effect of changes in demand on our network capacity requirements

We accept that the Information Quality Incentive is there to adjust expenditures within a reasonable range. However, a change in peak demand forecast could result in a future capacity gap and a requirement to fulfil this gap. Therefore where the demand change results in an impact over 1% of core allowed revenue, we require a re-opener mechanism to fund efficiently incurred network costs.

6.3. The cost of the emergency service

6.3.1. Summary of WWU business plan treatment

In our business plan we have included the benefit to consumers of the competitively won existing metering contracts. For a period of time within RIIO-GD1 this will provide a subsidy to the full cost of the emergency service. As volumes of work under these contracts decline as smart meters are rolled out, our proposal is that Ofgem funds the full efficient gross cost of the emergency service with a sharing mechanism equal to the strength of the Information Quality Incentive to incentivise networks to seek alternative work. The continuation of the existing meter tipping adjustment is an appropriate alternative where networks still have metering contracts with major Meter Asset Managers.

6.3.2. Background evidence and options considered

The operation of an emergency gas service is a key Licence condition on the GDNs. Therefore consumers should be expected to pay for the necessary and efficient cost of operating this service. To the extent that alternative infill work can be identified, and competitively won, consumers would benefit through reduced, necessary, unproductive/waiting time costs being charged to the emergency service. To the extent that this subsidy to consumers reduces as a result of unavoidable costs being “stranded” in the emergency category through reductions in this alternative work activity, consumers should expect symmetry of treatment and therefore bear the incremental cost.

Meterwork is the primary example of this infill work; it is within the skill set of the First Call Operative, is of relatively short duration and has the ability to be planned and performed around emergency work.

The meter tipping point adjustment in the current price control period is simple and operates effectively. Its continuation into the next control period is one appropriate method by which to compensate the GDNs for future reductions in meter work activity, resulting in increased, necessary, non productive waiting time.

Ofgem has stated that they do not intend including the meter tipping point adjustment in RIIO-GD1. Our proposed approach is to fully allow the efficient gross cost of the emergency service, before any subsidy from other activities such as metering, within RIIO-GD1. The Information Quality Incentive would then operate to encourage GDNs to find infill work in order to reduce the “net” cost of the emergency service. Under the

Information Quality Incentive for RIIO-GD1 any outperformance of the allowed emergency cost, as part of the Totex regime, would be shared between consumers and the GDNs. This is our proposed option reflected in our business plan.

It should be noted that the regression work Ofgem has currently undertaken is based on the costs charged to the emergency activity, net of the costs charged to metering and therefore only the subsidised costs being charged for the service. Therefore, in order to adopt this latter approach Ofgem will need to adjust their regression analysis onto the more appropriate gross basis. This better reflects the relatively fixed cost of providing the service and should result in a more robust analysis by Ofgem.

The emergency service is a core service provided by all networks and some networks such as WWU have succeeded in maintaining competitive metering work within a highly competitive environment since network sales and complied with emergency standards of performance. This has benefited consumers in reduced costs of the emergency service. Penalising such networks in the event of reductions in this workload by not allowing the full recovery of the necessary stranded cost is inappropriate and asymmetric.

This uncertainty is increased as the majority of meterwork is carried out on a commercial basis and is subject to normal contract rules and procurement arrangements. They are therefore retendered on a regular basis, and it is inappropriate to assume that if a network benefits from metering contracts at the beginning of a price control review period it will retain that contract in future years. By the same token, there is no way of forecasting whether the network will be successful in winning additional metering contracts.

In addition, metering contracts generally do not guarantee volumes and are subject to changes in policy, technology, reliability and the marketplace. The introduction of smart metering has increased the uncertainty in all of these areas with a number of stakeholders adopting a wait and see approach.

There are also a number of further unknowns regarding the effect of smart metering on workload including the volume of no gas calls to the emergency number. The provision of a future Post Emergency Meter service also needs to be reviewed as part of the Smart rollout programme as this will impact our ability to earn non formula income.

The shortage of skilled meter workers also brings with it some uncertainties, and there may be upward pressure on wage levels for meter workers as GDNs compete with suppliers and Meter Asset Managers for scarce resources. GDN First Call Operatives are some of the most experienced gas meter workers and therefore an organisation that is looking for experienced employees may well seek to attract GDN First Call Operatives.

6.4. The cost of the emergency service - strict application of 12 hour rule

6.4.1. Summary of WWU business plan treatment

Ex-ante allowance based on the current application of legislation by the HSE with a re-opener mechanism to fund any change in application of the legislation.

6.4.2. Background evidence and options considered

Gas Safety (Management) Regulations 1996 regulation 7(4) requires Network Operators to attend the escape as soon as is reasonably practical and then to prevent the gas escaping in 12 hours. The duty to prevent in 12 hours is absolute.

A defence is outlined in GSMR Regulation 7(10); with guidance; where it is not reasonably practical to prevent the escape in 12 hours, indicating that this covers examples where it is not feasible to complete a repair, for example, a severe fracture. Where it was not possible to prevent an escape in 12 hours, network operators would then need to demonstrate they took all reasonable steps to do so.

At the last price control review, GDNs illustrated that to comply fully with these regulations would cost approximately £22m per network per annum. It was put to HSE that this was not justified economically and whilst HSE would not consider changing the regulations, they issued a document HSE/ENF/SPC140 to help clarify the legal and operational issues. Semi Permanent Circulars are guidance issued to HSE Inspectors to assist with enforcement activities, but have no legal standing. They are openly published with SPC/140 addressing the concept of reasonable practicability by considering some of the circumstances where it may not have been reasonably practicable to prevent a gas escape within 12 hours of receipt of the publicly reported escape.

As long as HSE retain the existing absolute duty and leave SPC/140 as simple guidance to Inspectors, GDNs risk prosecution on one hand or a high cost for strict compliance on the other.

6.5. The costs of delivering the replacement programme

6.5.1. Summary of WWU business plan submission

We propose an ex-ante allowance for network forecasted costs with a symmetrical revenue driver for work mix changes within Tier 2. In addition, we propose a re-opener mechanism to address any funding and output delivery issues that would arise out of any future changes imposed by HSE and/or Ofgem. This aligns to the Ofgem proposals.

Also note that our replacement programme contained within our business plan is subject to safety case approval. We plan to submit our safety case change to the Health and Safety Executive (HSE) in early 2012.

6.5.2. Background and evidence

The HSE, sponsored by Ofgem, has recently conducted its scheduled ten year review of the Gas Distribution Iron Mains 30/30 programme. The programme is there to remove, over 30 years, the ageing and deteriorating iron mains pipes that are within 30 metres of peoples' homes. The programme was introduced in 2002. Regardless of the results of the review, our stakeholder feedback has identified that consumers want an efficiently delivered programme. There should also be protection for consumers and networks against the potentially large variations in costs that arise out of actual work requirements being significantly different to that anticipated. The work mix difference is more likely over an eight year period.

The HSE have also signalled a further review of the iron mains programme. There are no exact details but we therefore propose a re-opener mechanism to allow for changes resulting from any future review.

7. Environment

Section	Uncertainty	Description of uncertainty	WWU proposed uncertainty mechanism	Allocation of risk
7.1.2	Adaptation to climate change	In future networks could be subject to climate legislation which could result in unavoidable additional costs	Ex-ante allowance; Logging up mechanism to reflect any additional cost obligations placed on networks as a result of Government (Wales or England) legislation	Networks must be funded for efficient costs to undertake Government mandated requirements
7.1.3	Carbon reduction commitments	In future networks could be subject to climate legislation which could result in unavoidable additional costs	A re-opener mechanism to reflect any additional cost obligations placed on networks as a result of new Government (Wales or England) legislation	Networks must be funded for efficient costs to undertake Government mandated requirements
7.1.4	Other environmental legislation	In future networks could be subject to changes in legislation which could result in unavoidable additional costs	A re-opener mechanism to reflect any additional cost obligations placed on networks as a result of new Government (Wales or England) legislation	Networks must be funded for efficient costs to undertake Government mandated requirements
7.2	Environmental costs	In future networks could be subject to changes in legislation which could result in unavoidable additional costs	A re-opener mechanism to reflect any additional cost obligations placed on networks as a result of new Government (Wales or England) legislation	Networks must be funded for efficient costs to undertake Government mandated requirements

7.1. Climate change

7.1.1. Summary of WWU business plan treatment

Where reasonably known, we have included within our business plan a forecast of costs to fulfil our existing obligations within known legislation. As climate change legislation develops, the costs to WWU and therefore end users could escalate materially. We therefore propose a re-opener to address funding requirements as a result of likely legislative changes. We do not propose any threshold but would submit a claim when cumulative costs amount to 1% of annual core allowed revenue. Our view is that efficient costs to comply with legislation should be fully funded. The following paragraphs detail the likely areas of change and potential cost impacts for which the re-opener mechanism would apply.

7.1.2. Adaptation to Climate Change

WWU have utilised the most recent data, such as pluvial, fluvial and coastal flood maps, to perform this risk assessment. This investment is included within the business plan and utilises past experience of events such as river bank erosion, and other forecast key climate change impacts.

Data on the likely impacts of all climate change risks is not fully available; for example, some flood depth data will not be available until 2013-2015. Where detailed third party

data is not available to allow accurate forecasting of climate change impacts, a number of risks may require additional investment in the next price control review period from 2013 to 2021. The necessary third party data will become available at future dates and no investment has been included within our business plan to address these impacts.

WWU forecast that the potential investment required to account for this future uncertainty could range between £21.1m and £40.5m. Accelerated climate change impacts are expected before 2021, but the scale is unknown.

7.1.3. Carbon Reduction Commitment

The carbon reduction commitment is a mandatory energy efficiency scheme aimed at improving energy efficiency and cutting emissions in large public and private sector organisations, these organisations are responsible for around 10% of the UK's total emissions.

The qualifying threshold is currently 6,000MWh from Half Hourly Metering based on electricity consumption in 2008. WWU's total electricity consumption during the year was approximately 5,800MWh; its total from Half Hourly Metering (HHM) however was only approximately 1,800MWh, well below the threshold. WWU is therefore not currently obligated to be part of the scheme; they are however required to make an information disclosure to the Environment Agency, and this has been done. WWU has three Half Hourly Metering (HHM) sites. The scheme takes the form of a carbon tax.

Further significant changes to the latest carbon reduction commitment scheme are currently being discussed by the Coalition Government and industry, but no indication of likely outcome has currently been circulated. WWU's concerns include:

- Current qualifying thresholds and fuels could be amended such that WWU become captured, and
- Carbon Reduction Commitment as it currently stands could be replaced by incorporation into other reporting legislation with different qualification criteria.

Carbon reduction commitment costs are currently based on £12 per tonne with theoretical cost to WWU of £37m over the 8 year RIIO-GD1 period. Should any amendments or incorporation into other schemes result in charges as high as £54 per tonne being introduced, these costs would escalate to £166m.

7.1.4. Other Environmental uncertainties

In addition to adaptation to climate change and carbon reduction commitment reporting WWU may also need to meet other requirements from the Climate Change Act. At present it is unknown what additional requirements may come into force from the Climate Change Act but they may include factors such as changing legislative compliance – from either UK or Welsh Government or additional requirements for carbon reduction etc. which may lead to the need for additional investment which is not included within WWU's business plan.

7.2. Environmental costs

7.2.1. Summary of WWU business plan treatment

Statutory remediation and Holder demolition costs, based on current legislation are included in our plan. Due to the complete uncertainty over the future increase in costs, a re-opener mechanism is required to fund future changes to legislation. In the event that incremental costs exceed 1% of annual turnover, the full incremental costs are allowed.

7.2.2. Background and evidence

We have undertaken significant environmental investigation, risk assessment, options appraisal and remediation during the current price control review period 2008 to 2013. Whilst the majority of spend in this area has occurred in the last two years of the price control period, significant investment has been undertaken in the first three years on assessment, challenge and review and stakeholder discussion with most notably, the Environment Agency England and Wales, Local Authorities, Environmental Health and Planning Officers, and other interested third parties and landholders. WWU considers early discussion with these stakeholders has been critical in developing strategies and solutions that are both cost effective, sustainable and verifiable by enforcing Regulators (Environment Agency England and Wales and Local Authorities). The number of sites with potential historic gas manufacturing contamination owned by WWU is 130.

However it is anticipated that the cost of taxes associated with environmental remediation will continue to increase into the medium term. This includes land fill tax increasing from the current £48 per tonne, which has been used in the calculation of the above provision, to £80 per tonne by 2014. The Government has not given any indication of the policy after 2014, but with ever increasing challenges to reduce landfill consumption, it is inevitable some form of addition tariff or control will be imposed.

Evolving and future legislation also introduces unknowns into the future decision making process. It is reasonable to conclude that levels of contamination thresholds will continue to be lowered in relation to Controlled Waters over 2013-21, and as case law evolves in relation to the Environmental Damage (Prevention and Remediation) Regulations; existing strategies may have to be revisited. Defra are also currently consulting on proposals for updating and revising the Statutory Guidance which forms a key part of the contaminated land regime in England and Wales under Part 2A of the Environmental Protection Act 1990. Proposals do not appear to be overly onerous at the present time, but external influences may deliver or facilitate additional requirements and challenges.

Due to this uncertainty over the future increase in costs, an uncertainty mechanism is required. In the event that incremental environmental costs exceed 1% of annual turnover, the full incremental costs should be allowed.

8. Connections

Section	Uncertainty	Description of Uncertainty	WWU Proposed uncertainty mechanism	Allocation of risk
8.1.	Connection of Renewable sources of gas to the distribution network	A Cost to Networks not funded by the connectee - application of the economic test	A logging up mechanism to log up efficient costs incurred as a result of customer driven connections	Efficient network costs to facilitate renewable connections must be funded
8.2.	Large load connections to the distribution network	A Cost to Networks not funded by the connectee - application of the economic test	Logging up of efficient costs once DNs evidence efficiency	Networks cannot influence customer connection requests. Networks to be funded for efficient costs once an ARCA is signed
8.3.	Additional domestic connections to address fuel poverty and/or environmental issues	A Cost to Networks not funded by the connectee - application of the economic test	Ex-ante allowance for forecast volumes and Logging up of efficient costs for additional volumes.	Networks should promote connections that tackle fuel poverty and environmental issues. Networks to be funded for efficient costs.

8.1. The connection of renewable sources of gas to the distribution network

8.1.1. Summary of WWU business plan treatment

No ex-ante funding is requested but we propose a logging up mechanism to log up efficient network costs incurred. We also propose a re-opener for any change in charging Boundary. Our proposal aligns to the Ofgem March Strategy document proposals.

8.1.2. Background and evidence

As the lowest carbon producing fossil fuel, gas will continue to provide an important part of the energy mix for many years to come. An independent report by Redpoint⁴ produced for the industry late in 2010 identified that the Government 2050 carbon reduction targets could readily be achieved with gas continuing to play a key part in the energy mix - and crucially could save UK consumers some £700 billion compared to full electrification. This figure represents a £20,000 saving per household across the UK over the period to 2050. To support sustainable gas usage into the future the technology now exists to connect renewable sources of gas, such as biomethane, to the GDN. One concern is the potential need for network reinforcement to provide continuing entry capacity if exit demand reduces some years after the entry connection was made. We will work with potential producers to connect renewable gas to the network and we will require funding for our efficiently incurred costs which are not funded directly by the connectee. Therefore we propose an annual re-opener mechanism to log up efficient costs incurred.

⁴ Available at;
http://www.redpointenergy.co.uk/images/uploads/ENA_gas_future_scenarios_report_v1.1_FINAL.PDF

8.2. Connection of new large loads to the network requiring significant “growth” related Local Transmission System investment

8.2.1. Summary of business plan treatment

No upfront costs are included within our plan but a logging up mechanism is requested to adjust allowed costs once the network has a signed “Advanced Reservation Capacity Agreement”. This is a continuation of existing risk sharing between networks and consumers.

8.2.2. Background and evidence

It is likely during the next Price Control period from 2013 to 2021 that one or more major daily metered site (such as a power station or very large commercial / industrial property) will be built and connected to the existing WWU infrastructure. This probability is increasing as coal fired power stations close. If this occurs; and given the industry commercial requirements, it is probable that a significant non-funded, network expenditure would arise. We would expect Ofgem to continue the existing principle which has been applied during GDPCR1 which allows major expenditure that was not foreseen at the time of allowance setting to be funded once we have satisfied an efficiency test. An example would be: - once an Advanced Reservation Capacity Agreement is signed, Ofgem would fund the efficient cost for the relevant project and revise our price control allowance to place us in a Net Present Value neutral position compared to an ex-ante allowance being given.

8.3. Additional fuel poor and/or environmental domestic gas connections

8.3.1. Summary of WWU business plan treatment

Ex-ante funding of forecast costs associated with network submitted volumes and a logging up mechanism to fund additional efficient costs of consumer driven volumes above those assumed in business plan.

8.3.2. Background and evidence

We have worked with Ofgem and our partners to implement a Gas Fuel Poor scheme. To date, we have successfully appointed three partners, improved the scheme eligibility and together we have delivered over 3,000 fuel poor connections. We will continue to actively promote and deliver the scheme.

In addition to those in “defined” fuel poverty, there are many consumers who are close to the gas network (within 1km) but are unable to connect due to the current industry agreed connections charging methodology. Many of these use coal and oil to heat their homes which are less environmentally friendly, more expensive and less secure. Most of the communication we receive from MPs and Welsh Government Ministers, on behalf of communities, is in respect of the lack of the gas network for their communities. We will be working with our partners and industry to promote the right energy source for consumers to address fuel poverty, security of supply and environmental concerns. If we are successful, we would expect be funded for those costs not directly paid by the new connectees.

9. Meters

Section	Uncertainty	Description of Uncertainty	WWU Proposed uncertainty mechanism	Allocation of risk
9.1.	The costs of providing the Last Resort Meter obligation	The current rates we can charge were introduced in 2008/9. The efficient costs of providing this obligation are significantly higher than the current rates allowed.	Removal of the Licence obligation. Alternatively, removal or update to the Tariff caps to reflect actual costs of providing the obligation. A procedure to address stranding. The Smart meter programme has significantly increased this risk	This is a Government mandated, Supplier led rollout, therefore Networks to be compensated for efficient costs incurred. Debate to be had on how stranding is to be addressed
9.2.	The Government mandated replacement of Domestic Gas and Electric Meters with smart meters between 2014 and 2019. There are 2.5m Meters in our Geography	Costs incurred by Networks as a result of Government mandated supplier led Smart meter programme	Ex-ante allowance for WWU / industry agreed likely DN costs. Volume driver to address variable costs driven by workload. Also explore further funding options with Suppliers to reduce overall rollout programme costs to consumers	This is a Government mandated, Supplier led rollout, therefore Networks to be compensated for efficient costs incurred. Debate to be had on how various costs are to be charged to Shippers and/or consumers

9.1. The costs of providing the last resort meter obligation

9.1.1. Summary of WWU business plan submission

We propose the removal of the Meter Provider of Last Resort obligation and associated Tariff price caps. If the obligation remains, there must be an increase in the Tariff caps to reflect the efficient cost of providing the service.

9.1.2. Background and evidence

Metering has been a competitive activity for a number of years and there is a market for services. Unlike electricity distribution the obligation to be a "Meter Provider of Last Resort" has remained with GDNs despite the developments within the UK market. We have been engaged with Ofgem on this topic for some time and unfortunately no progress has been made. In our view, the Licence obligation is no longer appropriate and the allowed tariff caps are not representative of market rates. During this price control period from 2008 to 2013, we have had to fund the shortfalls in revenues caused by the inappropriate Tariff caps. Out of the 2.5m domestic meters in our geography, there are only circa 30,000 meters associated with this obligation. We have responded to the Ofgem consultation on this topic. If the obligation is to continue Ofgem must fund the efficient costs of meeting our obligations. Should the obligation remain, our business plan submission proposes increased rates for the tariff caps that reflect not only the current cost but the fact that future returns will be significantly reduced by the replacement of these meters with the supplier led and owned smart meters.

9.2. Smart metering

9.2.1. Summary of WWU business plan treatment

The government has announced that all domestic homes will have Smart Gas and Electric Meters by 2020. This will mean every existing gas and electric meter will be exchanged to a smart meter by suppliers by 2020. Within our network 2.5 million gas meters will be exchanged. If the programme starts in 2014, as expected, then 400,000 gas meters per annum will be changed across our geography each year. This activity level is almost four times the level of our current emergency workload. There are no proposals within the Ofgem March Strategy papers to address the impact on Networks.

Recognising this huge programme within our network we have carried out a unique and comprehensive survey of existing meters across our geography, engaged the large suppliers and distilled the results into expected workloads and costs over the current and subsequent RIIO-GD1 period. We have also shared the results of our research with the Department Of Energy and Climate Change (DECC) led industry Smart meter workgroups with the aim of finding a commercially practicable, cost effective solution for the benefit of consumers.

We have included a pragmatic view of the costs within our business plan. Our analysis, supported by the evidence of the only large supplier to have carried out any detailed field analysis, suggests that in approximately 28% of Smart Meter installations, Network intervention will be required.

For us to support the supplier led smart meter rollout there are costs that we will incur regardless of rollout volumes. In addition, there will be costs that will vary and the level of actual cost incurred will be dependent on actual workloads delivered by our workforce.

Therefore, In our business plan we have included forecast costs that will allow us to support the smart meter rollout programme, that are of a relatively fixed nature (e.g. training and back office costs) and also the costs, based on anticipated volumes of jobs that we would be required to attend and action.

In summary, we propose an ex-ante allowance based on our detailed research and a volume driver that will adjust the variable costs to actual workloads delivered.

An alternative solution is to allow a re-opener mechanism but we believe our robust analysis and industry engagement supports inclusion of the ex-ante allowance. The drawback of a re-opener compared to an ex-ante allowance would be a substantial cost shock to consumers part way through RIIO. On balance we believe our proposal will provide the most appropriate solution for consumers.

9.2.2. Background and evidence

Although the suppliers will control the rollout programme, the Government mandate states that all domestic gas and electricity meters will need to be replaced with “smart meters” by 2020. There are circa 2.5m domestic gas meters in our geography. The supplier led smart meter rollout plan is likely to impact the WWU business in a number of ways:

- Increased number of calls to the emergency service.
- Increased number of calls to the customer call centre.
- Increased number of service alterations resulting both from the condition of WWU’s assets and from shipper requests for work on “fit for purpose” assets to

enable a smart meter to be fitted, both leading to an increase in Repex service replacements.

- Increased resource and training requirements.
- Back office support functions.

Our internal work suggests that the impact is likely to be considerable and require significant new resource in our organisation. In addition, how the suppliers rollout smart meters will affect the resource requirements. Owing to the requirements of the smart meter rollout we believe that this resource will not be available to be hired when required and we will need to create this resource through recruitment and training.

If smart meters are rolled out throughout the year then there will be an increase in the peak workload with a commensurate increase in costs to the GDNs. There will be a larger impact on Repair and Replace teams who would carry out service alterations and service relays. These teams are currently fully utilised on other activities when not responding to emergencies. In addition to the additional front line resources WWU will require increases in support costs and back office support for them such as despatch.

There are further reasons why WWU could see increased calls other than those identified above and which are outside our control. One example is where the smart meter installer identifies a problem with the consumer's downstream pipework. Whilst the correct process for dealing with these escapes is for the consumer to call out a Gas Safe registered plumber, our experience is that a number of consumers, and possibly installers, will call the emergency number. The number of calls received will depend partly on how well the smart meter installers communicate with the consumer and partly on the availability of Gas Safe registered plumbers.

10. Other

Section	Uncertainty	Description of Uncertainty	WWU Proposed uncertainty mechanism	Allocation of risk
10.1	Street works including Traffic Management Act and New Road and Street Works Act	Uncontrollable costs imposed by Highway authorities that we cannot avoid in order to carry out our obligations	Ex-ante allowance for WWU forecast cost and a re-opener mechanism to fund efficient and necessary additional costs.	Networks have little control over Highway authority legislation. Networks to be protected against material non controllable costs necessary to fulfil obligations
10.2.	Centre for the Protection of National Infrastructure (CPNI)	Workloads and hence costs imposed by the Government to comply with National Security	Include values in WWU plan and a re-opener mechanism to fund additional, efficient, necessary costs	Networks to be funded for efficient costs to undertake Government mandated work for national security
10.3.	Mid Point review of Outputs	Ofgem has highlighted a review at the mid point. Any material change could impact network costs	Re-opener mechanism contained to reflect any material changes to the DN outputs required from the Mid point review	One of the intentions of RIIO is a "Mid Point review" of outputs. Any review could have a material impact on network costs and charges to consumers
10.4.	Real Price Increases of resources (RPEs)	Price changes above Retail Price Index of the resources to deliver obligations	Ex ante allowance for WWU forecast and a review at the midpoint of RIIO-GD1	The network cannot influence the market prices of commodities and the longer price control period increases the likelihood of significant change
10.5.	Funding of NTS Pension costs & WWU Pension Deficit	Cost to fund the pension historic pension deficit.	Cost pass through of deficit payments to National Transmission. True up of network forecast deficit costs to valuation as at 31/03/2013	Networks protected from historic deficit costs.
10.6.	Tax treatment		Annual re-opener mechanism for any additional costs that arise from any changes to the accounting rules that would place additional costs on the network	Networks to be funded for efficient costs to undertake Government mandated requirements

10.1. Increased cost of street works

10.1.1. Summary of WWU business plan treatment

We have included forecast costs for future Permit and Lane Rental charges based on analysis undertaken with authorities in our geography. Due to the uncertain future, non controllability and the potential materiality of charges, we support re-opener mechanisms to adjust forecast costs to those actually incurred.

10.1.2. Background, evidence and options considered

The introduction of the Traffic Management Act has led to WWU incurring additional costs for working in the highway, mainly through the introduction of Fixed Penalty Notices and the associated increase in s74 charges. Whilst the financial impact of these changes has, to an extent, been mitigated by improving noticing and operational performance, a noticing performance of 98% or higher still carries a potential significant financial risk (circa £110k per 1% failure). However, the actual financial liability is very much dependent on future legislation and the approach of the individual local authority. Certain authorities will apply the legislation for all relevant failures whilst others will be more reasonable and flexible in their approach.

For our operations in Wales, the introduction of the Traffic Management Act has also led to the Welsh Authorities introducing New Roads and Street Works Act s74 charging, a practice that was not in place prior to the introduction of the Traffic Management Act. It is therefore expected that the cost of our operations in Wales will increase by considerably more than those in the rest of the UK.

The Traffic Management Act also enables the introduction of Permit schemes which requires the works promoter to pay a fixed fee for working in the highway, dependent on the Notice type. To date, Permit schemes have been introduced in London, Kent and Northampton but not by any authorities in our operational area.

To aid the introduction of Permit schemes the Government has committed to removing the need for any such scheme to be signed off by the Secretary of State by April 2012, the responsibility for approving a scheme being held within a local authority.

In addition to Permit schemes the Government has also set out its intentions through the Department for Transport to pass regulations that will enable authorities to introduce Lane Rental. Such a scheme would require the works promoter to pay a fixed fee for occupying any highway or section of designated highway, presently proposed at £2,500 per day or part thereof. It is expected that a Lane Rental scheme will be in place on a number of Transport for London strategic routes where there are recognised 'pinch points' by April 2012.

Through the Lane Rental consultation process the Department for Transport has expressed that these regulations will be in place for use by all authorities and not restricted to London.

It is anticipated that it is only a matter of time before a Permit scheme and/or Lane Rental scheme is introduced in our network. Therefore, following dialogue with a number of our local authorities we have determined the probability adjusted financial impact of such schemes and included them in our business plan.

However, recognising that reducing the impact of congestion and the state of the UK highway network remain high on the political agenda, the potential for further regulations and legislation remain.

Of particular note is the potential to implement legislation enabling regulations already in place under the New Road and Street Works Act allowing an authority to require full/half width reinstatement and/or the payment of a reinstatement retainer or insurance levy dependent on the level or work undertaken.

It is anticipated that the financial impact of such requirements would be significant but the quantum and timing are unknown. We therefore have not included such costs within our business plan.

10.2. The Costs associated with National Security

10.2.1. Summary of WWU business plan submission

We propose an ex-ante allowance for network forecasted costs with a re-opener mechanism for material cost variations aligned to the Ofgem proposals.

10.2.2. Background and evidence

The Government department that is responsible for national security is known as the Centre for the Protection of National Infrastructure. Some of our assets fall into a category that requires us to ensure a level of security to meet the Centre for the Protection of National Infrastructure requirements. We have reviewed our assets and included within our business plan the costs required to ensure compliance to the Centre for the Protection of National Infrastructure requirements. If there are any further material changes to the requirements we must be allowed to fund additional efficient costs.

10.3. The Mid point review of outputs

10.3.1. Summary of WWU business plan submission

We have included an ex-ante allowance for network forecast costs to deliver the stakeholder required outputs as well as our Licence and legal obligations. We propose a re-opener mechanism to allow for adjustments to costs associated with any material change to the definition of outputs. This change could be as a result of the mid point review or other stakeholder input. This is aligned to the Ofgem strategy decision documents.

10.3.2. Background and evidence

A key principle of funding within RIIO is the requirement for networks to engage with stakeholders, and then define a set of outputs. Networks will then be rewarded for the delivery of those outputs. Therefore, there is a clear link of costs and revenues to outputs. We support this approach and have been fully engaged within all the industry outputs working groups to define the first set of outputs for gas distribution. The outputs philosophy is in its infancy and there is no practical experience of the RIIO regime. Therefore we think it is wholly appropriate to have a re-opener mechanism to address any material changes to Outputs that arise within this first RIIO regulatory period.

10.4. Real price effects (above inflation cost pressures) and efficiencies

10.4.1. Summary of WWU business plan submission

Ex-ante allowance for network forecasted costs in line with GDPCR1 but with a review at the midpoint of RIIO-GD1 to take into account the longer price control period. We have included an efficiency challenge of 1% within our business plan submission that broadly offsets the ex-ante allowance for the real price increases.

10.4.2. Background and evidence

As part of our business plan we commissioned independent expert views on the likely real price effects to which we will be subject in the future.

In broad terms, based on the mix of resources we use, we forecast a 0.8% increase above RPI to the current cost levels. Whilst these are informed views from an independent expert, there is clearly a degree of uncertainty related to the future predictability of several resources. As an example, PE pipe costs are linked to future oil prices. Therefore Ofgem should be conscious of the risk that the real price effect used within the business plan are a base case and consequently allow for a margin of error in the final allowances.

The main conclusions reached in the report are:

- **Real Price Index (RPI) and Consumer Price Index (CPI) forecasts:** RPI forecast to rise 4.2% in 2011 and CPI by 3.7%. Inflation will ease back in 2012 and grow at a slower pace over the longer term.
- **Wages per person in the utilities sector:** expected to grow by 1.6% in 2011. They will gradually pick up over the medium term and grow by 3.9% annually over the longer term. Allowing for RPI inflation, wages will decline by 2.6% in 2011. Wages growth (nominal) is expected to pick up in subsequent years, growing by 3% in 2012, 3.5% in 2013 and 4.1% in 2014 as the economic recovery gathers pace. Over the rest of the forecast period, wages will grow at an annual pace of 3.9%. Allowing for RPI inflation, wages in the utilities sector will grow by approximately 1% per annum over the longer term.
- **Producer prices for aggregates:** forecast to grow 3.4% in 2011 and at an annual average pace of 2.5% over the rest of the forecast period. As aggregate prices will grow at a slower pace than RPI, real aggregate prices will continue to decline over the forecast period.
- **Producer prices for coated macadam (Tarmac):** forecast to grow 3.1% in 2011 and at an average annual pace of 2.8% over the rest of the forecast period. Allowing for RPI growth, prices will fall in the medium term and remain broadly unchanged over the longer term.
- **Wages per person – road operatives:** forecast to grow 1.8% in 2011. Beyond 2015, wages are expected to grow at an annual pace of 3.9%. Allowing for RPI inflation, road operatives' real wages will grow 1.1% per annum over this period from 2008 to 2013.
- **Producer prices for plastic pipes:** forecast to rise 7.6% in 2011 and at an average pace of 3.9% over the rest of the forecast period. Allowing for RPI growth, plastic pipe prices will grow at an annual average pace of around 1% over the longer term.
- **Producer prices for steel pipes:** expected to grow 18.3% in 2011 with growth easing back thereafter. From 2015-2021 real prices will grow at an annual average pace of 0.7%.
- **Diesel:** expected to rise 16.1% in 2011. Prices will rise at a slower pace averaging 5% over the rest of the forecast period. Real prices will continue to grow at a firm pace over the longer term.

- **Electricity:** forecast to rise by 11.5% in 2011, 9.9% in 2012 and 8.4% in 2013. Beyond 2014 it will grow at an annual average pace of 4.2%. Allowing for RPI growth, electricity prices will grow at an average pace of 1.4% from 2015-2021. **Gas: expected** to grow at a strong pace over the medium term and at a slightly lower pace over the rest of the forecast period. Allowing for RPI growth, gas prices will grow at an average pace of 1.6% from 2015-2021.

Whilst delivering first class customer service, meeting all standards and excellent safety performance in the relatively sparse and challenging Wales and South West geography, we have been able to significantly reduce costs during the current price control period. This has placed us in the upper quartile of cost efficiency, based on Ofgem's Totex benchmarking analysis.⁵ Our aim is to continue to meet our Licence obligations, and deliver safe, first class outputs to consumers. We fully acknowledge that we need to continually deliver efficient services and therefore we have set ourselves an annual 1% challenge for each year of the next price control. This efficiency challenge is included within our business plan within Opex, Repex and Capex.

10.5. Pensions

10.5.1. Summary of WWU business plan submission

We have included an ex-ante allowance for the following three elements, which are aligned to the current Ofgem Strategy;

- The Pensions deficit as at 31st March 2013 (the established deficit). Clearly this will not be visible at this time, therefore we have included our best estimate based on the deficit as at 31st March 2009.
- The "legacy" pensions deficit that is paid to National Grid Transmission.
- Ongoing costs of pensions post 31st March 2013 within our total costs of employment.

10.5.2. Background and evidence

The funding of pensions is the subject of an ongoing workgroup. Notwithstanding this, the inclusion of ongoing pensions within total cost of employment is a change to the current funding arrangements and increases the funding uncertainty for networks.

10.6. Changes in tax treatment including the potential capitalisation of Repex on adoption of International Financial Reporting Standards

10.6.1. Summary of WWU business plan treatment

No ex-ante funding is requested and we propose a continuation of the existing re-opener mechanism.

⁵ Ofgem Benchmarking comparison contained in the March 2011 Strategy documents

10.6.2. Background evidence and options considered

Ofgem allows the gas distribution networks to recover from consumers projected corporation tax payments.

In the past, no corporation tax has been paid by WWU, and hence none recoverable from consumers. This was due to a combination of:

- the corporation tax treatment of replacement expenditure, and
- WWU gearing being higher than the notional 62.5%

The proposed change from UK Generally Accepted Accounting Principles (UK GAAP) to International Financial Reporting Standards (IFRS), effective 1 April 2014, will result in replacement expenditure ceasing to be treated as a revenue cost, but being capitalised as an asset. Taxation treatment will also change, from an allowed operating expense in the year of expenditure to capital allowances calculated at 8% reducing balance under long life special pool.

The overall pool allocations of capital expenditure assumed in the business plan are based on the current tax treatment of the category of asset and have been calculated using the detailed asset allocations.

WWU has not modelled the tax implications of any other impacts of the implementation of IFRS (e.g. accounting for derivatives). This is on the basis that the impact cannot be quantified and modelled. However, it is essential that a re-opener mechanism is introduced to reflect the impacts of these changes.

10.7. Other Legislation/policy changes

10.7.1. Summary of WWU business plan treatment

There are a limited number of potential changes to legislation that could result in significant costs to networks which were not foreseen at settlement. This risk increases over an eight year settlement. We think it is appropriate to include a “re-opener” adjustment when costs reach a material level. We recommend an annual re-opener mechanism to fund all efficient costs of such changes once the 1% of the average annual core allowed revenue is reached. The following paragraphs detail the likely inclusions. The list is not meant to be complete and the re-opener should be flexible enough to address other similar non foreseeable circumstances.

10.7.2. Strict application of Working Time Regulations

The Working Time Regulations came into force on 1 October 1998 and were subsequently amended on 17 December 1999. They implement the EC Working Time Directive (and parts of the EC Young Workers Directive which relate to the working time of workers under age 18).

The objective of the Working Time Regulations is to protect workers from risks of excess working time which can lead to stress, fatigue and risks to health and safety.

WWU recognise that, due to the nature of its work and to safeguard public safety, there is an ongoing need for overtime associated with emergency work and essential maintenance. The business and its managers have a responsibility to monitor overtime working, to minimise its use and any possible adverse affects.

The main provision of the Working Time Regulations which is likely to have an impact on WWU's emergency working is the limit of an average of 48 hours a week over a reference period which a worker can be required to work (the other provisions are outlined in the legislation and the WWU Policy).

Currently, individuals may, and do, choose to agree to work more than the 48 hour average weekly limit. This is a voluntary right under the Working Time Regulations of which workers are made aware, but managers still have a responsibility under Section 2 of HASWA 1974 to ensure that the working time of individuals who opt out is not excessive.

Should the opt-out facility be removed through legislation, as is currently proposed, this would limit our ability to manage resources at times of peak workload and impact our ability to meet statutory Standards of Service. Based purely on hours worked in one reference period over winter 2010/11, it is estimated that WWU would need an increase of circa 10 to 15 full time equivalents in order to make up the additional working hours, should the opt-out facility be withdrawn. However, this additional resource would be required to be split across the whole network so might be more significant in true terms as 10 to 15 First Call Operatives could not meet the requirements of all units, should they occur at the same time. The impact would be more significant, as WWU would be required to release more First Call Operatives on rest time following a standby shift which can currently be managed within the working day via the opt-out mechanism.

10.7.3. Gas Safety (Management) Regulations 1996

Gas Safety (Management) Regulations are due for review within the next two years. The impact is unknown and no views to the scope of the review have been tabled.

10.7.4. Pipelines Safety Regulations 1996

The Pipelines Safety Regulations are currently being reviewed following a consultation process in 2010. The proposals included a significant increase in the requirements for testing emergency plans by local authorities, with costs being charged to the gas transporter. With over 40 Local Authorities within WWU's geography, and a suggested frequency of testing being every three years, WWU would have to support and pay for one emergency exercise per month. Costs could exceed £180k per annum.

10.7.5. Freedom of Information Act 2000 and, by extension, the Environmental Information Regulations 2004

The Ministry of Justice has for some time consulted on the potential to bring the network infrastructure utilities within the scope of the Freedom of Information Act 2000; this was indicated as a commitment of the Coalition Government. While this has not been pursued to date it is expected to happen within the RIIO GD1 control period. The business would need to make further investment in terms of people and document recovery, given that the effect would be retrospective, and the short timescales to comply with requests. It is expected that if this were to happen the Environmental Information Regulations would also be amended to apply to network infrastructure utilities.

10.7.6. Debt Indexation – Composition of Index

The iBoxx indices proposed for future debt allowances are controlled by a third party organisation. There clearly is a future risk, driven from the fact that neither Ofgem nor

network companies can influence any changes to index composition in the future (nor the impact of such changes on future debt allowances).

As an example, Markit (who manage the index) announced in September changes to the index which will be effective on 1 Jan 2012 that re-classify many utilities and airport operators as 'corporates'.

Although the impact of the above known change is broadly neutral, the impact of future unknown changes may be material. It is essential therefore that a mechanism is introduced to protect networks from the uncertainty arising from the future re-definition of the index composition. In order to address this issue we would like Ofgem to commit to 'locking' the composition of the index at the start of the RIIO-GD1 period and hence protect both network companies and gas consumers from the unintended impact of changes in its composition.

10.8. The unknown

Whilst WWU has included within our business plan those events of which we are reasonably certain, there are likely to be a number of unidentified events which occur over the duration of RIIO-GD1 that remain unidentified. We have not built any contingency into our business plan for such costs. Consequently Ofgem should have consideration to this when assessing the business plan.

11. Concluding comments

Within this document we have covered our proposals to address the key risks and uncertainties that we will face over the RIIO-GD1 period. Our aim is to ensure an appropriate balance of risk between ourselves and our consumers. We have highlighted a continuation of existing risks and some new and significant uncertainties that do not currently exist. They include:

- The lengthening of the price control period to eight years.
- The Supplier led smart meter programme.
- New legislation including street works legislation.
- The charges from National Transmission and any changes to the existing commercial arrangements.
- The costs required to deliver the stakeholder outputs.
- The funding of the replacement programme and future HSE legislation.
- The increasing uncertainty of environmental and climate change costs.

Any discussions that alter the proposed mechanisms contained within this paper would clearly change the risk profile of the business plan and hence impact the proposed rate of return and risk sharing proposals (the Information Quality Incentive rate).