

Title: Transfer of private water supply pipes to Water and Sewerage Company ownership IA No: Defra 1502 Lead department or agency: DEFRA Other departments or agencies: Welsh Government	Impact Assessment (IA)		
	Date: 15/03/2013		
	Stage: Consultation		
	Source of intervention: Domestic		
	Type of measure: Primary legislation		
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Summary: Intervention and Options	RPC Opinion: RPC Opinion Status
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Cost of Preferred (or more likely) Option			
Total Net Present Value	Business Net Present Value	Net cost to business per year (EANCB on 2009 prices)	In scope of One-In, Measure qualifies as One-Out?
£m	£m	£m	Yes IN

What is the problem under consideration? Why is government intervention necessary?

There is under-maintenance and repair of private water supply pipes; high levels of leakage (up to a quarter of total leakage); public confusion on ownership and an increased risk for drinking water quality from lead pipes. Intervention is necessary due to these market failures and because Water and Sewerage Companies (WaSCs) are regulated regional monopolies with little consistency in applying repair policies for private water supply pipes across the network.

What are the policy objectives and the intended effects?

The transfer of privately owned water supply pipes to the water companies (adoption) would provide improved opportunities for innovation and allow the engineering and management of the whole of the service pipe to be addressed and help facilitate an integrated and sustainable approach for the whole network. There is likely to be: improved operational performance, improved customer service and potentially positive impact on households, improved understanding of the network from the need to maintain records of the adopted pipe improvements to drinking water quality (replacement of lead pipes), and possible reduction in water pipe leakage.

What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)

Option 0 - Do nothing: Private supply pipes would remain under private ownership. Current WaSC policy of repairing private pipes will remain variable across the network and maintenance and repairs continue on a report and repair basis. No potential improvement in leakage and water quality.

Option 1: Engage with Ofwat and WaSCs to develop a voluntary code of practice to provide a consistent approach to the maintenance and repair of private supply pipes.

Option 2: To create a power (through primary legislation) to make Regulations which compel WaSCs to make a declaration of adoption in respect of certain water pipes. This would then allow for secondary implementing legislation at a later stage from which any impacts (and hence a fully costed IA) would flow. Our preferred option is Option 2.

Will the policy be reviewed? It will be reviewed. If applicable, set review date: 06/2020					
Does implementation go beyond minimum EU requirements?				N/A	
Are any of these organisations in scope? If Micros not exempted set out reason in Evidence Base.		Micro Yes	< 20 Yes	Small Yes	Medium Yes
What is the CO ₂ equivalent change in greenhouse gas emissions? (Million tonnes CO ₂ equivalent)				Traded:	
				Non-traded:	

I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.

Signed by the responsible SELECT SIGNATORY: _____ Date: _____

Summary: Analysis & Evidence

Policy Option 1

Description: Voluntary Code of Practice

FULL ECONOMIC ASSESSMENT

Price Base Year	PV Base Year	Time Period Years	Net Benefit (Present Value (PV)) (£m)		
			Low: Optional	High: Optional	Best Estimate:

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	Optional	Optional	Optional
High	Optional	Optional	Optional
Best Estimate			

Description and scale of key monetised costs by 'main affected groups'

Other key non-monetised costs by 'main affected groups'

WaSCs would be encouraged to take a consistent approach on the repair and maintenance of supply pipes and therefore costs of supply pipes, which would indirectly impact consumers' water bills. This option is unlikely to provide long term resilience, given that WaSCs would still not have the responsibility for the whole pipe network. There may be inconsistencies of approach between regions/WaSCs.

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	Optional	Optional	Optional
High	Optional	Optional	Optional
Best Estimate			

Description and scale of key monetised benefits by 'main affected groups'

Other key non-monetised benefits by 'main affected groups'

Where WaSCs have taken on responsibility, private owners will no longer have to pay the upfront costs of insurance or maintenance/repair of supply pipes. This can include households and businesses.

Key assumptions/sensitivities/risks

Discount rate (%) 3.5

During consultation we will discuss with WaSCs to see what would be deliverable beyond their current work programmes and report and repair policies

BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:	In scope of OIOO?	Measure qualifies as
Costs:	NO	NA
Benefits:		
Net:		

Summary: Analysis & Evidence

Policy Option 2

Description: Create a power to regulate

FULL ECONOMIC ASSESSMENT

Price Base Year	PV Base Year	Time Period Years	Net Benefit (Present Value (PV)) (£m)		
			Low: Optional	High: Optional	Best Estimate:

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	Optional	Optional	Optional
High	Optional	Optional	Optional
Best Estimate			

Description and scale of key monetised costs by 'main affected groups'

Other key non-monetised costs by 'main affected groups'

WaSCs would take responsibility for upfront capital expenditure (capex) and annual costs of maintenance. Costs would be passed through to customers under Ofwat's regulatory mechanisms. There will be a potential impact on insurance companies offering pipe maintenance and repair policies, and on private repair businesses.

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	Optional	Optional	Optional
High	Optional	Optional	Optional
Best Estimate			

Description and scale of key monetised benefits by 'main affected groups'

Other key non-monetised benefits by 'main affected groups'

Private supply pipe owners would no longer need to pay insurance/maintenance costs. This includes both households and businesses. The capital assets would allow WaSCs to claim a rate of return from any capex work. Social benefits arise from WaSCs' more efficient and long term strategic operation of assets & higher health & safety standards, especially surrounding lead. Removal of liability, distress & sense of unfairness from private supply pipe owners.

Key assumptions/sensitivities/risks

Discount rate (%)

3.5

We will seek evidence on costs and benefits during the consultation process. This option is to create a power which would allow for secondary implementing legislation at a later stage. The costs and benefits would be realised as a result of this secondary legislation (which would involve a further, more worked up, impact assessment) but we describe likely effects above.

BUSINESS ASSESSMENT (Option 2)

Direct impact on business (Equivalent Annual) £m:			In scope of OIOO?	Measure qualifies as
Costs:	Benefits:	Net:	YES	IN

Evidence Base (for summary sheets)

Problem under consideration

Private owners are generally currently responsible for the maintenance and upkeep of water supply pipes¹. This has led to a variety of problems including severe under-maintenance of these assets and increased risk for drinking water quality from lead pipes. It is estimated that 23%, some 770 mega litres per day² of total leakage comes from these private supply pipes. Water and Sewerage Companies (WaSCs) have various Codes of Practice setting out how they address any leakage from household supply pipes and may in some situations offer subsidised or free repairs.

Water supply impacts to customers include burst pipes, blockages, pressure losses, leakage and water quality (discolouration and lead). Customers are currently responsible for funding any repair work which may involve significant lump sum costs at the time of an incident, or the cost of insuring against incidents, though in some cases Water Companies voluntarily provide assistance and repairs. Although helpful at the time of an incident, varying Water Company practice adds to confusion on the part of customers as to their responsibilities. Furthermore, one significant health risk that remains is compliance with the drinking water standard of 10ug/l for lead at the tap, whilst orthophosphate³ dosing has significantly reduced this risk there remain some hot spot areas where compliance has not been achieved by the water company

Rationale for intervention

The Government recognises that the water industry has a vital role in the transition to a greener economy which needs a sustainable, resilient and affordable water supply. The supply pipe is a critical component of the infrastructure but is essentially unmanaged, because of lack of knowledge of water customers and affordability constraints, which results in an under-maintenance of a “merit good⁴” by private owners. Rates of current replacement infer an implied age of supply pipes exceeding their likely economic life. Absence of adequate investment in supply pipes is not sustainable in the long term. Under the current ownership arrangements, variations in voluntary WASC policies result in a lack of customer clarity. The aging in situ pipework will continue to deteriorate in performance in respect of leakage control and public health protection (lead).

Government intervention is necessary as WaSCs are regulated regional monopolies with little consistency applying repair policies for private water supply pipes across the network. There is also an information failure as there is public confusion surrounding ownership of supply pipes, and maintenance which may be required.

The water industry has already successfully delivered improved infrastructure and high quality drinking water while reducing its impacts on the environment and keeping bills affordable. Transfer of private supply pipes may improve the water sector’s ability to deliver the resilient, sustainable and customer-focused services by delivering real benefits for customers through improved stewardship of the water supply infrastructure, exploiting economies of scale and helping spread the costs of this to improve affordability.

Adoption could potentially provide for better management and repair of these pipes in the most economic way, help facilitate an integrated and sustainable approach to network management and possibly lead in the longer term to a reduction in the level of leakage, along with a positive impact on water quality and the financial impact on households.

¹ The Water Supply (Water Fittings) Regulations 1999 define “supply pipe” as so much of any service pipe not vested in the WaSC. The usual termination of the supply pipe is the internal stop valve. Common terminology further divides it into the “underground supply pipe” and the “above ground supply pipe”.

² Latest (2010/11) figures obtained from Ofwat.

³ Orthophosphate is a chemical used to inhibit corrosion in water supply pipes.

⁴ A merit good is something which is considered to be underprovided by the market mechanism and it is often argued that it should apply universally to everyone, which means there can be a role for intervention in order to provide it.

Policy Objective

The policy objective is to achieve a long term sustainable strategy for managing water supply pipes. The communication pipe, which is owned by the WaSCs, connects to the privately owned service pipe at the boundary of the property. The length of pipe between the property boundary through to its emergence above ground to the floor or in an external wall box is the portion owned by the property owner. This is the portion of the pipe we are proposing to be adopted by the WaSC. This is shown in Figure 1 below.

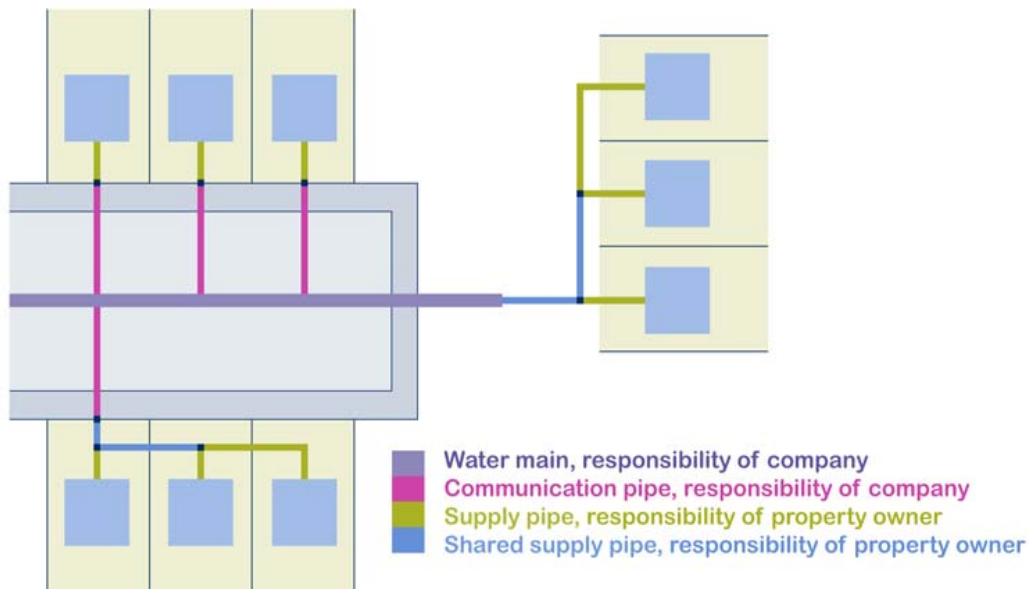


Figure 1 - Source: <http://www.ofwat.gov.uk/consumerissues/rightsresponsibilities/supplypipes>

A possible route to effective supply pipe management is through adoption by the existing appointed WaSCs. Adoption could provide the opportunity to introduce cost effective new innovative technologies, for example in respect of the development of lining systems for lead pipes which in turn will have a positive impact on water quality. There is also likely to be improved operational performance, customer service and understanding of the network from the need to maintain records of the adopted pipe.

Customers are currently confused about who owns supply pipes and who is responsible for their maintenance and repair. Adoption is likely to provide a clearer understanding and remove the diversity of company policy towards current repair of supply pipes. Consumer Council (CC) for Water's Annual Tracking Survey 2008-2009 found some customer confusion over responsibilities for maintenance of private water supply pipes. Just over half (55%) were aware that it was their responsibility to maintain these pipes. A third (33%) mistakenly thought that the WaSC was responsible and 6% thought that it was the local council. An adoption scheme would result in the transfer of a high costs from the few customers requiring repairs or replacements at any one time, to a lower ongoing maintenance cost met by all customers through their water bills.

Funding of over £100m was allowed for communication pipe replacement and plumbosolvency⁵ control at the last price review and this should alleviate current risks. However, the long term sustainability of orthophosphate dosing in the water supply is questioned due to the long term availability of dosing material and the cost of continual dosing. Ownership of supply pipes by WaSCs does provide long term accountability for lead compliance and ensures that a long term strategy for lead replacement can occur in a risk based manner. Where customers are supportive, an economic and efficient replacement of lead piping can then be effectively planned at an affordable pace to consumers.

⁵ Plumbosolvency is name of the process that takes place after pumping orthophosphate through lead pipes. The reaction forms a crystalline layer creating a barrier between the water and the lead and also reduces pipe corrosion.

Options

This consultation stage impact assessment explores the potential costs and benefits surrounding different options. At this stage these are all non-monetised.

Option 0: Do nothing

Private supply pipes would remain under private ownership. Current WaSC policy of repairing private pipes will remain inconsistent across the network and maintenance and repairs continue on a report and repair basis. As the WaSC does not own or have responsibility for the asset, there would be no incentive for WaSCs to introduce leakage detection and repair policies beyond their current policies. In the case of some house owners, they would continue to pay insurance (roughly £35 per annum⁶) for the repair of leaking pipes. The cost of a repairs are typically in the region of £500-900⁷, with a more complicated repair (e.g. under a conservatory) could run into £1000s'.

Option 1: Voluntary Code of Practice

Engage with Ofwat and WaSCs to develop a voluntary code of practice to compliment their current private supply pipe maintenance and repair policies. There is no current evidence on the impact of this option. We would need to consult with WaSCs to see what would be deliverable beyond their current work programmes and report and repair policies, and whether there would be opportunities for a consistent approach to maintenance and repair by WaSCs. However, this is unlikely to provide long term resilience given that WaSCs would still not have the responsibility for the whole pipe network.

Non-monetised costs

WaSCs would be encouraged to take on responsibility and therefore the costs of supply pipes. Uptake may differ between regions/WaSCs. Customer bills are likely to be indirectly affected.

Non-monetised benefits

Under a voluntary code of practice, private owners may no longer have to pay the upfront costs of insurance or maintenance for supply pipes. This can include households and businesses.

Option 2: Create a power to regulate

This option is to create a power to make Regulations which compel WaSCs to make a declaration of adoption in respect of certain water pipes, that is, to hand over ownership of the portion of water supply pipes that are currently privately owned to the WaSCs. The impacts will arise from the secondary implementing legislation rather than from this enabling primarily legislation. The consultation will help clarify the full extent of these impacts but we have explored what these are likely to be below.

The application of the transfer of water pipes could potentially provide for better management and repair of these pipes in the most economic way, as well as facilitating an integrated and sustainable approach to network management. This may in the longer term lead to a reduction in the level of leakage by speeding up repair times through the establishment of a clear ownership position and WaSC response policy.

The groups affected by the proposed options at the secondary legislation stage include: Consumers, households, WaSCs, businesses, local authorities, housing associations, and other property owners such as government, NGOs, and institutions, insurance companies; pipe repair businesses, regulators e.g. Ofwat, Environment Agency, Drinking Water Inspectorate, Consumer bodies e.g. CC Water; and Government.

⁶ Advertising information for two of the larger insurance companies offering this type of service indicate premiums between £35 to £43 pa. However, some policies may not cover external, privately owned pipes, further adding to the confusion for the customer.

⁷ These are anecdotal estimates of cost.

Adoption may have significant and various impacts on stakeholders as there would be a shift in cost burden from individual property owners on to the generality of water customers. A UK Water Industry Research (UKWIR) report in 2009 estimated annualised costs from adoption of around £4/property/per annum in bill increases to the customer. These would potentially be offset by a reduction in customer costs from the transfer of maintenance obligations to WaSCs since the property owner would no longer need to pay for any repairs, maintenance or insurance for the pipes which have been adopted. As set out earlier, anecdotal evidence is that costs for periodical repairs after an incident are in the range £500-900 or greater in more complicated cases.

There will also be benefits to wider business from no longer being responsible for former private supply pipes in the same way there will be for households.

However, adoption may have an adverse impact on insurance companies who currently provide products to householders to cover risks to supply pipes, sometimes in conjunction with water companies. Development of supply pipe serviceability criteria may lead to improved customer service in an area not wholly covered at present. However, it should be appreciated that different water catchment areas have different infrastructures, for instance rural/urban, age of the stock and different types of pipe material. Therefore it is likely any increase in water bills will vary from area to area.

The adoption will impact on plumbing businesses. Although there could be a potential reduction in use of plumbing services by private users, if WaSCs develop new/additional maintenance and repair programmes as a result of the adoption, it is likely there will be a long term increase in demand for plumbing and building services which may or may not benefit those companies losing private trade.

Although water companies may not insure against newly-acquired risks, they may need to access financial markets for capital where investment is required. However, there may be implications for the competitive market for water services provided to non-household customers. The draft Water Bill includes provisions to extend retail competition to all non-household customers. The draft Water Bill does not define 'retail' in this context but it is possible that identifying and repairing private supply pipes might be a feature of the evolving market. However, this will be dependent on whether new entrants are willing and able to provide such a service across England and Wales and whether customers will want to include repair services as part of their arrangements with new entrants.

It is our initial view that if a transfer was to take place new entrants would have a role in identifying any on-site leaks and their contracts would include arrangements for making contact with the WaSC to request repairs to the supply pipes. There are several companies which offer insurance products for the repair and maintenance of private pipes who may be affected. This however may be offset by the WaSCs subsequently increasing their own business insurance to cover the additional assets, or requiring access to capital in the financial services sector more broadly defined. A full impact assessment will, in due course, seek to confirm the overall costs and benefits of any transfer.

Some WaSCs have indicated a desire to adopt supply pipes through their Strategic Direction Statement. We believe most are generally supportive of adoption. Other policy factors will require consideration such as the impact on human rights given the interference with property rights (pipe ownership) and the implications for the existing works/entry powers (whether this implies an increase in instances where powers or entry are utilised for WaSCs to carry out repair work).

Areas we will seek further evidence on before development of secondary legislation include:

- a clear understanding on the full impact on WaSCs, clarity on their responsibilities, the benefits in terms of improving the water supply infrastructure and how WaSCs will be incentivised and financed;
- the delivery of leakage reduction and replacement lead pipes programmes;
- the impact on customers, including benefits, the impact on bills and the potential impact on low income families;
- interference with property rights (pipe ownership);
- impact on existing entry rights / works power over private land;
- potential impact on future retail competition;

- potential impact on insurance companies offering pipe maintenance and repair policies, and on private repair businesses;
- understand the extent of the private supply network.
- impact on property developers and new property developments.

Any implementation of secondary implementing legislation will need to be aligned with economic regulation timescales so that the costs and investment needed from WaSCs can be reflected in business plans in time for PR19 (Price Review 2019)⁸.

A further and more comprehensive analysis of the risks and benefits of adoption of supply pipes will need to be undertaken during the development of the Impact Assessment for the secondary implementing Regulations.

Non-monetised costs

Key costs will be upfront capital expenditure (capex) and annual costs to be borne by WaSCs, with capex in particular being highly uncertain at this stage. Although treatment of these costs is ultimately for OfWAT as an independent economic regulator, based on past experience they are likely to be passed through to customers with due regard for cost efficiency. Liabilities and costs are transferred from private owners.

There will be a potential adverse impact on insurance companies offering pipe maintenance and repair policies, and on private repair businesses, offset by potential benefits to other repair contractors and financial services interests (e.g. banks and equity providers).

Non-monetised benefits

Private supply pipe owners will no longer need to pay insurance or maintenance costs. This includes both households and businesses.

The capital assets will allow WaSCs to claim a rate of return on them.

Social benefits to all from WaSCs' more efficient and long term strategic operation of assets, exploiting economies of scale, and higher health & safety standards especially surrounding lead. Removal of liability, distress & sense of unfairness from private supply pipe owners.

Our preferred option is Option 2.

One-In-Two-Out

The direct impact on business will be a result of secondary implementing legislation. There will be costs imposed on WaSCs (transferred from private owners) due to maintenance/investment. The water supply pipes will be capital assets and will have some value, as they will allow WaSCs to claim a rate of return which will offset maintenance and investment costs. There will also be benefits to wider business from no longer being responsible for former private supply pipes which will also have an offsetting effect⁹.

The overall net impact is expected therefore to be of a small or zero net cost, and we will look to explore this further during the consultation process.

Review

If secondary legislation is not enabled, a "sunsetting" review of the enabling clause will be undertaken to decide whether to retain or remove the power.

⁸ One of OFWAT's primary duties is to make sure that the companies are able to carry out and finance their functions under the Water Industry Act 1991. They set price limits that allow each company to do this, while protecting the interests of customers. The price limits are reviewed every five years.

⁹ This draws on parallels with the transfer of private sewers impact assessment (<http://www.ialibrary.bis.gov.uk/uploaded/Defra1333%20FINAL%20IA%20ZNC%20Transfer%20of%20Private%20Sewers.pdf>)