Title: Gas (Designation of Pipelines) Order (NI) 2016	**Regulatory Impact Assessment (RIA)**
	Date: August 2016
	Type of measure: Subordinate Legislation
Lead department or agency: Department for the Economy	**Stage:** FINAL
	Source of intervention: Postalisation of costs associated with constructing and operating an inter-town pipeline providing natural gas to Strabane as part of the Gas to the West project.
Other departments or agencies: N/A	**Contact details:** Fred Frazer
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Summary Intervention and Options

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

The NI Executive has approved grant assistance for a major project to extend the natural gas network to further towns in the West ('Gas to the West'). The economic viability of the project is supported by 'postalising' the costs associated with constructing and operating the new inter-town gas pipelines. This means that these costs will be added to a 'postalised' pot and recovered from all NI gas consumers (both business and domestic) over a 40 year period through a common transmission tariff within gas bills. This follows established policy for the development of the natural gas industry in NI. To give effect to this policy, all high pressure (> 7 bar) gas transmission pipelines in the West will be "designated" for the purposes of the common tariff under Article 59 of the Energy (NI) Order 2003. The first to be designated will be a section of the new pipeline from Maydown to Strabane which is due for completion in October 2016. The remaining high pressure gas transmission pipelines in the West will be subject to a further Designation Order upon completion in due course.

What are the policy objectives and the intended effects?

The overall strategic objectives for gas network extension are:

(i) To promote the development and maintenance of an efficient, economic and co-ordinated gas industry in Northern Ireland;
(ii) To extend the availability of natural gas, as a more efficient and potentially cheaper fuel, providing additional fuel choice, thus enabling businesses to improve their competitiveness in an increasingly global market place;
(iii) To extend the availability of natural gas as a lower carbon fuel, displacing more polluting fossil fuels, thus providing environmental benefits; and
(iv) To enable domestic consumers within the towns considered to connect to natural gas, thus contributing to reducing fuel poverty.

The proposed designation of major pipelines within the new gas network in the West for the purposes of the common tariff is in accordance with established postalisation policy underlying development of the natural gas industry in NI which aims to ensure the economic viability of major gas assets by spreading costs across all gas consumers in NI.

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

A 'Do Nothing' option was considered and rejected because failing to postalise the cost of the major inter-town gas pipelines in the West and include costs within the common tariff would result in the project being uneconomic. The Department's preferred option is to implement Designation Orders, including the proposed 2016 Order in respect of part of the Maydown to Strabane pipeline, which will permit application of a common gas transmission tariff to major pipelines in the West in accordance with agreed principles of postalisation for the NI gas industry.

Will the policy be reviewed? There are no plans at present to review postalisation policy.	**If applicable, set review date:** N/A

Cost of Preferred (or more likely) Option		
Total outlay cost for business £m	**Total net cost to business per year** £m	**Annual cost for implementation by Regulator** £m
It is estimated that postalisation of all the inter-town pipelines in the West will add 0.04-0.05% to all gas bills.	This represents an increase of £0.96 on a typical SME gas bill of £2665 per annum, or £960 per annum for a large energy user using 2m therms of gas per year.	Contained within administrative budgets.

Does Implementation go beyond minimum EU requirements?			**NO** ☒	**YES** ☐
Are any of these organisations in scope?	**Micro** Yes ☒ No ☐	**Small** Yes ☒ No ☐	**Medium** Yes ☒ No ☐	**Large** Yes ☒ No ☐

The final RIA supporting legislation must be attached to the Explanatory Memorandum and published with it.

Approved by: Simon Hamilton Date: 13/09/2016

SUMMARY ANALYSIS AND EVIDENCE

Policy Option: 2

Description: Designation of major gas assets (> 7 bar) in the West for the purposes of the common tariff under Article 59 of the Energy (NI) Order 2003.

ECONOMIC ASSESSMENT (Option 2)

The Department's Full Business Case for Gas to the West (July 2015) estimated that the project should have a net present benefit to the Northern Ireland economy of £688.8m[1]. The underlying assumptions behind this estimate include the application of postalisation policy to enable costs associated with the higher pressure inter-town pipelines to be recovered from all gas consumers through a common transmission tariff over a 40 year period.

Costs (£m)	**Total Transitional (Policy)** (constant price)	Years	**Average Annual (recurring)** (excl. transitional) (constant price)	**Total Cost** (Present Value)
Low				
High				
Best Estimate			**£2.25m**	**£90m**

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

Taking the grant assistance into account, it is estimated that the postalised common transmission tariff for NI gas consumers will have to increase by 0.5% to recover the approx. £90m capital cost of the new inter-town gas pipelines and associated infrastructure in the West over a 40-year period, including the £10m Strabane pipeline. This translates to 0.04-0.05% on overall gas bills and represents an increase of £0.96 per annum on a typical SME bill of £2665, or £960 per annum for a large energy user with current gas usage of 2m therms of gas.

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

None identified.

Benefits (£m)	**Total Transitional (Policy)** (constant price)	Years	**Average Annual (recurring)** (excl. transitional) (constant price)	**Total Benefit** (Present Value)
Low				
High				
Best Estimate			**£18m**	**£720.3m**

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

The key benefit of postalising the inter-town pipelines in Gas to the West is that it makes the project economically viable, therefore facilitating provision of natural gas as an alternative fuel of choice to domestic consumers and businesses in the West. The overall project is estimated to have a net present benefit to the Northern Ireland economy of £688.8m. While in commercial terms, the NPV of costs minus revenues is negative at -£31.6m, the net benefit of environmental and fuel savings is estimated at £720.3m to the Northern Ireland economy.

[1] Figures quoted in this RIA are drawn from the Department's Full Business Case on Gas to the West (July 2015) and are based on estimated costs provided at that time by the project developers. Final project costs will not be known until tendering for the main contracts has been completed.

Other key non-monetised benefits by 'main affected groups' Energy consumers in the West will benefit from having additional fuel choice, and the project offers potential for short term and longer term employment opportunities associated with development of a new energy industry.
Key Assumptions, Sensitivities, Risks The results of the Department's NPV analysis of Gas to the West, and of its assessment of the project's impact on the common gas transmission tariff, are dependent on assumptions made about costs, customer uptake, and benefits of fuel switching and emissions reductions. The sensitivity analysis indicated that the project is most sensitive to changes in the forecast heating oil price and the resultant margin between heating oil and gas prices. Changes in forecast volume sales would also have a large impact on the size of the NPV to the NI economy.

BUSINESS ASSESSMENT (Option 2)

Direct Impact on business (Equivalent Annual) £m				
Costs: Negligible	**Benefits: £0.5m**	**Net: £0.5m**	**SMEs**	**See below**

Benefits to businesses in the West will largely relate to the differential between oil and gas prices at any particular time which have ranged between 10% to 30% in recent years and, for those businesses which opt for gas in the West, it is estimated that the cost of providing the new higher pressure gas networks will result in gas bills which are up to 0.05% higher than current gas bills in Northern Ireland. It is estimated that some 1800 small to medium sized businesses in the West could connect to gas, and even with oil and gas prices being the same, there are commercial benefits for businesses to convert to natural gas, due to the greater efficiency of gas, no requirement for on-site bulk fuel storage, and potential for efficient gas fired Combined Heat and Power (CHP) systems to reduce electricity costs.

To consider an example of the impact on SMEs in the West only, for an average small to medium-sized business gas bill estimated at £2665 per annum, postalising the major new gas networks in the West will add 0.04% to current gas costs equating to an additional c£0.96 per annum. If gas prices were 10% lower than oil prices, disregarding conversion costs, each SME connecting to gas could save around £266 per annum equating to c£0.5m per annum for some 1800 SMEs in that gas licensed area. For the estimated 90 larger businesses in the West, savings are much greater.

Businesses in existing gas licence areas will see a small increase of up to 0.05% on final gas bills due to the Gas to the West project, but alternatives to gas are not considered to be as advantageous.

Cross Border Issues (Option 2)

How does this option compare to other UK regions and to other EU Member States (particularly Republic of Ireland) Postalisation of the costs associated with major gas transmission pipelines is permitted under the Gas Tariff Code which has been developed in line with the EU Gas Regulation (EC 715/2009). Postalisation is utilised in a number of EU Member States, including the Republic of Ireland.

EVIDENCE BASE

Background

Natural gas was first introduced to Northern Ireland via the Scotland to Northern Ireland gas pipeline in 1996. By end-2015, there were around 187,000 gas consumers in the Greater Belfast and Larne licence area and 28,000 in the 10 Towns licence area outside Belfast. However, a number of areas, particularly in the West and in East Down, do not currently have access to natural gas.

The Strategic Energy Framework 2010, which was endorsed by the NI Executive, supports further extension of the natural gas network where it is economic to do so. It is estimated that over 65% of homes in Northern Ireland are still dependent on oil for heating, and extending the natural gas network will help to reduce greenhouse gases and fuel poverty.

Problem under consideration:

Plans to extend the natural gas network to further towns in the West (namely Dungannon, Coalisland, Cookstown, Magherafelt, Omagh, Enniskillen, Derrylin, and Strabane) will be delivered by private sector developers, West Transmission Ltd (WTL) and SGN Natural Gas (SGN), under exclusive gas conveyance licences granted by the Utility Regulator on 11 February 2015 following a competitive process.

The project developers provided information in July 2015 to help the Department complete its Full Business Case for grant assistance. At that time, WTL/SGN estimated the overall cost of the project at £212.6m, including £113.7m for the major inter-town pipelines and associated infrastructure. The remaining costs are associated with the low pressure gas distribution network to be provided around main towns to connect consumers to gas. The NI Executive agreed in January 2013 to provide grant assistance up to a maximum of £32.5m at a rate of 35% of eligible expenditure towards provision of the high pressure gas transmission pipelines – in line with the European Commission's State aid approval. The costs associated with the major inter-town gas pipelines which are not covered by the grant (estimated at around £90m) will have to be recovered over the 40-year licence period from consumers through the postalised 'transmission tariff' element within their gas bills.

The business model upon which the NI gas industry has been developed since 1996 prescribes that the transmission tariff is 'postalised', setting a common gas transmission tariff for all gas consumers in NI. It is proposed to follow this established model for the Gas to the West project, with the cost of the inter-town gas pipelines and associated infrastructure to be added to the 'postalised' pot from which the common (and strictly regulated) gas transmission tariff is calculated. This entails the Department ''designating'' part of the new gas pipeline from Maydown to Strabane, which is due for completion in October 2016, for the purposes of the common tariff under Article 59 of the Energy (NI) Order 2003.

It is estimated that, after 40 years, the new gas infrastructure in the West could serve some 40,000 consumers with almost 70% of gas volumes required for industrial and commercial customers. It is assumed that 70% of available domestic consumers will connect to gas and between 70% and 100% of available business customers will connect, with the higher connection rates for larger energy users where greater efficiencies can be realised by switching from oil.

Rationale for intervention:

Policy objectives:

The overall strategic objectives for gas network extension are:

(i) To promote the development and maintenance of an efficient, economic and co-ordinated gas industry in Northern Ireland;

(ii) To extend the availability of natural gas, as a more efficient and potentially cheaper fuel, providing additional fuel choice, thus enabling businesses to improve their competitiveness in an increasingly global market place;

(iii) To extend the availability of natural gas as a lower carbon fuel, displacing more polluting fossil fuels, thus providing environmental benefits; and

(iv) To enable domestic consumers within the towns considered to connect to natural gas, thus contributing to reducing fuel poverty.

The gas network may only be extended where it is economic to do so and the policy of postalising the cost of major inter-town pipelines and associated infrastructure has been developed on the basis of ensuring the economic viability of these assets[2].

The policy of postalisation was first consulted upon in June 2002 as part of the preparation for the implementation of the Energy Order. This was followed by a paper on the 'Design of the Postalisation System for Northern Ireland Gas Transmission Network' in December 2002; Recommendations for the 'Implementation and Operation of a Postalisation System for Natural Gas Transmission Tariffs in Northern Ireland' in June 2003; and a 'Decision Letter' in October 2003.

The Energy Order subsequently put in place the powers necessary to give effect to postalisation. In particular, Article 59 gives the Department the power to designate pipelines for the purpose of securing that the prices charged for conveyance of gas through designated pipelines are in accordance with a Common Tariff (Article 60).

The extension of the gas industry in Northern Ireland and the implementation of postalisation has been supported by the Utility Regulator who has been consulted about the terms of the proposed Designation Order for part of the Maydown to Strabane pipeline.

Description of options considered:

- **Option 1 – do nothing.**

  If the high pressure transmission sections of the new gas network in the West, including the relevant section of the Maydown to Strabane pipeline which will be the first completed, are not designated, it will not be possible to recover costs through the mechanism of a common tariff. Failure to implement a common tariff would result in excessive and unacceptable costs being imposed on potential gas consumers in the West. Energy consumers would therefore be unlikely to switch from more polluting fuels, such as fuel oil, to clean burning natural gas resulting in the pipeline not being economically viable. This would likely result to natural gas not becoming available to both business and domestic consumers in the West. This option is therefore not carried forward.

- **Option 2 – do minimum.**

  Implement Designation Orders for the high pressure transmission sections of the new gas network in the West to permit a common tariff to be applied in accordance with the agreed principles of postalisation. This action follows the precedent set by all high pressure gas transmission pipelines already constructed in Northern Ireland.

Costs and Benefits

Costs:

For the Department's 2015 Full Business Case on the Gas to the West project, WTL/SGN estimated the cost of providing all the new inter-town gas pipelines and associated infrastructure in the West at £113.7m, including £67.8m for the high pressure elements of the new gas network. Final costs will be subject to tendered contracts to provide the new infrastructure.

The revenue required to cover capital expenditure for all the new inter-town gas pipelines in the West is therefore approximately £90m (£113.7m minus grant assistance at a rate of 35% applied to

[2] Smaller distribution pipelines within towns are deemed economically viable at a local level and are not therefore added to the postalised pot.

the cost of the high pressure transmission pipelines) over a 40 period which translates to an average of £2.25m per annum.

It is important to note that, as postalisation of the Maydown to Strabane pipeline forms the first part of the new gas networks to be provided and postalised as part of the Gas to the West project, cost impacts are provided for all the inter-town pipelines to ensure an adequate assessment of the impact of overall costs. For the Maydown to Strabane pipeline, infrastructure costs are estimated to be around £10m or 9% of the overall inter-town pipeline aspect of the Gas to the West project.

When added to the 'postalised' pot total of approx. £50m (for the 2015/16 gas year) in Northern Ireland, it is estimated that, for all inter-town pipelines to be provided within the Gas to the West project, and taking the grant assistance into account, the common transmission tariff for all gas consumers in NI will have to increase by 0.5% to cover the cost of the new inter-town gas pipelines and associated infrastructure in the West. This translates to 0.04-0.05% on overall gas bills and represents an increase of £0.96 on a typical SME bill of £2665 per annum or £960 per annum for a large energy user with current gas usage of 2m therms of gas per annum. The table below which is drawn from the Department's 2015 Full Business Case provides further detail:

Gas to the West Impacts – Common Transmission Tariff

Transmission Tariff increase		With Grant	
		£ per Therm	**%**
		0.0005	0.5%
Bill increase	**Current Annual Bill**	**£ per Annum**	**%**
Domestic	639.65	0.23	0.04%
Small IC	2,665.20	0.96	0.04%
Medium IC	33,315	12	0.04%
Contract I&C 75,000	75,000	36	0.05%
Contract I&C 500,000	500,000	240	0.05%
Contract I&C 2,000,000	2,000,000	960	0.05%

It is important to note that the cost of the inter-town pipelines and associated infrastructure for Gas to the West are recovered from all gas consumers in Northern Ireland, including power generators, business, and domestic users.

Operational costs are much lower than the capital costs associated with provision of the higher pressure inter-town gas networks, and are estimated at c£1.9m pa for the purposes the Department's economic analysis.

Benefits:

CO2 Reductions

Natural gas produces 26% less carbon than fuel oil, and thus switching from oil to gas makes a significant contribution to reducing environmental impacts. It is estimated that up to 40,000 business and domestic consumers in the West will convert to natural gas, resulting in a reduction of 106,400 tonnes of carbon dioxide (CO_2) by the final year of the 40 project for all towns served by the Gas to the West gas pipelines.

Business Competitiveness

The availability of natural gas in the West will provide an additional fuel of choice for businesses in the West. This could help to improve their business competitiveness and present an opportunity to increase export potential, along with options for installing gas-fired Combined Heat and Power (CHP) plants for on-site electricity generation. The indigenous and successful agri-food industry in the Dungannon/Cookstown area and the manufacturing sector has been pressing the Department to make natural gas available in the West and its provision will support development plans for some companies in this sector.

Small Businesses

The Gas to the West project will provide natural gas to the urban areas of Dungannon, Coalisland, Cookstown, Magherafelt, Omagh, Enniskillen, Strabane and also to Derrylin. This will provide additional fuel choice to small businesses, with the potential to reduce energy costs given the greater efficiencies of natural gas.

Employment

The construction and engineering sectors in Northern Ireland have been severely impacted by the economic downturn. The project developers estimate that extending gas networks to the West will provide employment for around 200 engineering and construction staff involved in the design, planning, and installation process, with perhaps some 35 engineers and on-site installation staff allocated to rolling out gas distribution networks and connecting consumers over a number of years in the selected towns. There will also be employment and re-training opportunities for heating engineers and installers of domestic and commercial heating installations as consumers convert to gas.

Rationale and evidence that justify the level of analysis used in the RIA (proportionality approach):

Risks and assumptions:

Economic analysis of the Gas to the West project in the Department's 2015 Full Business Case assumes that the cost of the new inter-town pipelines will be postalised for the purposes of the common gas transmission tariff based on existing policy.

Assessment of the impact of the project on the common tariff, and on the Northern Ireland economy generally, is also dependent on assumptions made about costs, customer uptake, and benefits of fuel switching and emissions reductions. The sensitivity analysis has indicated that the project is most sensitive to changes in the forecast heating oil price and the resultant margin between heating oil and gas prices. Changes in forecast volume sales would also have a large impact on the size of the NPV to the NI economy.

CONCLUSION

The Department concludes that legal designation of high pressure gas transmission pipelines in the West, including the high pressure section of the new pipeline to connect Strabane to natural gas, follows established principles and practice for development of the NI gas industry. It ensures that the costs of such pipelines are spread across all gas consumers in NI and thus maintains the economic viability of the gas industry.

CONSULTATION

The Department published a public notice on the draft Designation Order on 23 June 2016 and invited any representations **by 5 August 2016**. The public notice may be found on the Department's website at www.economy-ni.gov.uk. The Department received two acknowledgements of the public notice and no substantive responses. The Department also received a letter from an elected representative seeking clarification on cost impacts and a response was provided.

The Utility Regulator supports the proposed designation of the high pressure section of the Maydown to Strabane pipeline.

MONITORING AND REVIEW

The Department will liaise with the Utility Regulator who will monitor the operation and the common tariff structure agreed for the pipeline.

Compliance with gas licence conditions is enforced by the Regulator who has the power to impose financial penalties of up to 10% of the turnover of the licensees in the event of a breach.