Title: Provision of third party access to licence exempt electricity and gas networks	Impact Assessment (IA)
	IA No: DECC0013
Lead department or agency: Department of Energy and Climate Change	**Date:** 14/01/2011
Other departments or agencies: Ofgem	**Stage: Final**
	Source of intervention: EU
	Type of measure: Secondary legislation
	Contact for enquiries: Steve.davies@decc.gsi.gov.uk Richard.davies1@decc.gsi.gov.uk

Summary: Intervention and Options

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

Many businesses distribute and supply energy as an associated part of their core activities. In most cases these businesses are exempt from the requirement to hold and comply with a licence. The exempt energy sector is, however, still required to comply with certain obligations of EU law.

Following the European Court of Justice (ECJ) ruling on the Citiworks case, these proposals aim to ensure that licence exempt electricity and gas distribution networks offer third party access as required under the Electricity Directive and the Gas Directive. The Government has taken the minimum cost implementation option for these businesses. All Member States have to comply with EU legislation and therefore GB needs to transpose the requirements into UK law.

What are the policy objectives and the intended effects?

The policy's objective is to ensure third party access to licence exempt energy distribution networks. This will ensure energy customers benefit from competition in the energy supply market.

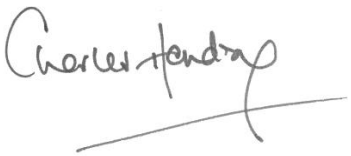
What policy options have been considered? Please justify preferred option (further details in Evidence Base)

The main proposal is to provide third party access to licence exempt networks. In doing so the self-certified class exemption regime for licence exempt distribution networks will be retained. The requirement that third party access must be provided to these networks will be set out in legislation. Guidance will be published describing how compliance might be achieved. (Please see section on "Options for Compliance".)

When will the policy be reviewed to establish its impact and the extent to which the policy objectives have been achieved?	Please refer to over-arching IA
Are there arrangements in place that will allow a systematic collection of monitoring information for future policy review?	No

Ministerial Sign-off For final stage Impact Assessments:

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 Minister:  Date: 12/01/2011

Summary: Analysis and Evidence

Policy Option 1

Description: Provision of third party access to licence exempt electricity and gas networks

Price Base Year 2010	PV Base Year 2010	Time Period Years 20	Net Benefit (Present Value (PV)) (£m)		
			Low: -£49m	**High:** £645m	**Best Estimate: £133m**

COSTS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	n/a	n/a	£3.45m	**£49m**
High	n/a		£5.3m	**£75m**
Best Estimate	n/a		£5.3m	**£75m**

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

The main costs associated with providing third party access to these networks are those associated with metering. These costs will vary substantially across the options. The commercial agreement and 'deemed' metering implementation models are estimated to carry the lowest implementation costs (additional meter reconciliation and administration costs only), whereas the 'opt in / opt out' model is expected to be twice as costly (as a result of having to add the costs for the provision of full settlement meters for customers opting out).

The best estimate on costs, using the opt in/opt out model, has a present value of £75m , which includes £1m for Ofgem approving tariffs and methodologies.

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

Reduced incentives to build networks and sizeable start-up costs.

BENEFITS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	n/a	n/a	0	**0**
High	n/a		£50.7m	**£720m**
Best Estimate	n/a		£14.65m	**£208m**

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

The main potential benefit from ensuring third party access is that consumers could benefit from lower energy prices. The top end of the range of benefits is given by assuming all customers switching would have price savings of 6% estimated by Ofgem in their Energy Supply Probe if they switch to a more beneficial tariff. An assumption of a switching rate of 13% is made, consistent with the Ofgem Energy Supply Probe findings for small businesses. The £720m high estimate includes both environmental and price benefits.

For the best estimate scenario, there will be energy savings estimated at around 155,000 MWh. This is the 'opt in / opt out' option with 13% of customers switching with no price benefit but saving 2.55% energy consumption. These environmental benefits are based on the use of advanced smart meters. The estimated present value of £208m only includes the environmental benefits and no price benefits.

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

None.

Key assumptions/sensitivities/risks **Discount rate (%)** 3.5%

We are making key assumptions regarding the size of the licence exempt network market, potential switching rates, energy consumption saving and electricity prices. The key sensitivities used to produce the range of cost-benefit estimates are the implementation model chosen and the potential price saving for customers switching.

Impact on admin burden (AB) (£m):			Impact on policy cost savings (£m):	In scope
New AB:	**AB savings:**	**Net:**	**Policy cost savings:**	No

Enforcement, Implementation and Wider Impacts

What is the geographic coverage of the policy/option?			Great Britain		
From what date will the policy be implemented?			2011		
Which organisation(s) will enforce the policy?			DECC, Ofgem, EC		
What is the annual change in enforcement cost (£m)?			£71,000 for Ofgem		
Does enforcement comply with Hampton principles?			Yes		
Does implementation go beyond minimum EU requirements?			No		
What is the CO_2 equivalent change in greenhouse gas emissions? (Million tonnes CO_2 equivalent)			**Traded:** 1.227	**Non-traded:** 0	
Does the proposal have an impact on competition?			Yes		
What proportion (%) of Total PV costs/benefits is directly attributable to primary legislation, if applicable?			**Costs:** -	**Benefits:** -	
Annual cost (£m) per organisation (excl. Transition) (Constant Price)	**Micro**	**< 20**	**Small**	**Medium**	**Large**
Are any of these organisations exempt?	No	No	No	No	No

Specific Impact Tests: Checklist

Set out in the table below where information on any SITs undertaken as part of the analysis of the policy options can be found in the evidence base. For guidance on how to complete each test, double-click on the link for the guidance provided by the relevant department.

Please note this checklist is not intended to list each and every statutory consideration that departments should take into account when deciding which policy option to follow. It is the responsibility of departments to make sure that their duties are complied with.

Does your policy option/proposal have an impact on…?	**Impact**	**Page ref within IA**
Statutory equality duties[1] Statutory Equality Duties Impact Test guidance	Yes	14
Economic impacts		
Competition Competition Assessment Impact Test guidance	Yes	9
Small firms Small Firms Impact Test guidance	No	
Environmental impacts		
Greenhouse gas assessment Greenhouse Gas Assessment Impact Test guidance	Yes	11-12
Wider environmental issues Wider Environmental Issues Impact Test guidance	Yes	11-12
Social impacts		
Health and well-being Health and Well-being Impact Test guidance	No	
Human rights Human Rights Impact Test guidance	Yes	13
Justice system Justice Impact Test guidance	Yes	14
Rural proofing Rural Proofing Impact Test guidance	No	
Sustainable development Sustainable Development Impact Test guidance	No	

[1] Race, disability and gender Impact assessments are statutory requirements for relevant policies. Equality statutory requirements will be expanded 2011, once the Equality Bill comes into force. Statutory equality duties part of the Equality Bill apply to GB only. The Toolkit provides advice on statutory equality duties for public authorities with a remit in Northern Ireland.

Evidence Base (for summary sheets) – Notes

Use this space to set out the relevant references, evidence, analysis and detailed narrative from which you have generated your policy options or proposal. Please fill in **References** section.

References

Include the links to relevant legislation and publications, such as public impact assessment of earlier stages (e.g. Consultation, Final, Enactment).

No.	Legislation or publication
1	Ofgem, 2008 Energy Supply Probe: http://www.ofgem.gov.uk/Markets/RetMkts/ensuppro/Documents1/Energy%20Supply%20Probe%20-%20Initial%20Findings%20Report.pdf
2	DECC, July 2010 Non-domestic Smart Meter Roll-out Impact Assessment: http://www.decc.gov.uk/assets/decc/Consultations/smart-meter-imp-prospectus/222-ia-smart-roll-out-non-domestic.pdf
3	DECC call for evidence: http://www.decc.gov.uk/en/content/cms/consultations/eu_energy_mkt/eu_energy_mkt.aspx
4	EC Third Package Impact Assessment: http://ec.europa.eu/energy/gas_electricity/interpretative_notes/doc/2007_09_19_impact_assessment.pdf
5	Transmission Price Control Review 2007-12: http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=191&refer=Networks/Trans/PriceControls/TPCR4/ConsultationDecisionsResponses
6	DECC consultation: http://www.decc.gov.uk/en/content/cms/consultations/imp_eu_third/imp_eu_third.aspx

+ Add another row

Evidence Base

Ensure that the information in this section provides clear evidence of the information provided in the summary pages of this form (recommended maximum of 30 pages). Complete the **Annual profile of monetised costs and benefits** (transition and recurring) below over the life of the preferred policy (use the spreadsheet attached if the period is longer than 10 years).

The spreadsheet also contains an emission changes table that you will need to fill in if your measure has an impact on greenhouse gas emissions.

Annual profile of monetised costs and benefits* - (£m) constant prices

	Y_0	Y_1	Y_2	Y_3	Y_4	Y_5	Y_6	Y_7	Y_8	Y_9
Transition costs	-	-	-	-	-	-	-	-	-	-
Annual recurring cost	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
Total annual costs	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
Transition benefits	-	-	-	-	-	-	-	-	-	-
Annual recurring benefits	14.65	14.65	14.65	14.65	14.65	14.65	14.65	14.65	14.65	14.65
Total annual benefits	14.65	14.65	14.65	14.65	14.65	14.65	14.65	14.65	14.65	14.65

* For non-monetised benefits please see summary pages and main evidence base section

Evidence Base (for summary sheets)

Purpose

1. To ensure the GB electricity and gas markets comply with the European Court of Justice (ECJ) ruling on the Citiworks case on third party access, as well as the EU Third Package more broadly.

Background: the Citiworks case and the EU Third Energy Package

2. The requirement to provide for third party access to energy systems is set out at article 32 of the EU Directive concerning common rules for the internal market in electricity[2] (the "Electricity Directive"), and article 32 of the EU Directive concerning common rules for the internal market in natural gas[3] (the "Gas Directive"). These provisions require Member States to ensure the implementation of a system of third party access to gas and electricity transmission and distribution systems based on published tariffs, applicable to all eligible customers and applied objectively and without discrimination between system users. Tariffs, or the methodologies underlying them, are required to be approved prior to their entry into force by Ofgem, as the national regulatory authority. In addition, tariffs and methodologies are required to be published.

3. In May 2008, the European Court of Justice's ruling in *Citiworks AG*[4] clarified that the requirement to provide for third party access applied in respect of all transmission and distribution systems (as defined in the Directives), and that it was not open to Member States to exempt certain types of transmission or distribution systems from the requirement. The complaint in *Citiworks* had been brought by an electricity supplier seeking to compete with a monopoly supplier at Leipzig airport. The ECJ ruled that the German law which exempted the owners of certain systems from the requirement to provide third party access contravened the requirement to provide for third party access to distribution systems. The judgement made it clear that all distribution networks must be open to third party access so that customers connected to those networks have the option to choose their own electricity and gas suppliers.

4. The objective of the Directives is to ensure fair competition, which ultimately protects consumer choice and also to improve productivity and efficiency of the market.

5. Under the Electricity Act 1989, it is illegal to generate, transmit, distribute or supply electricity without a licence or an exemption. A system of exemptions in Great Britain was formalized by the Electricity (Class Exemptions from the Requirement for a Licence) Order 2001 (the "Class Order 2001"). Amongst other things, an entity which operates under a distribution exemption is currently exempt from the requirement (present in distribution licences) to provide third party access to the system.

6. Similarly, under the Gas Act 1986, a licence is required to convey gas through pipes to premises or to a pipe-line system operated by a gas transporter, to supply gas which is conveyed to premises through pipes, or to arrange for gas to be put into, conveyed on or taken out of a pipe-line system. Exemptions from the requirement to hold a licence are contained in various exemptions orders made under s.6 Gas Act 1986. An entity which distributes gas under an exemption from the requirement to hold a gas transporter's licence is, like an exempt electricity distributor, exempt from the requirement to provide third party access to the system.

7. In light of the *Citiworks* ruling, the Government needs to make provision for third party access to licence exempt systems.

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[2] Directive 2009/72/EC. This Directive must be implemented into domestic law by 3 March 2011 and replaces Directive 2003/54/EC, which contained a similar requirement.
[3] Directive 2009/73/EC. This Directive must be implemented into domestic law by 3 March 2011 and replaces Directive 2003/55/EC, which contained a similar requirement.
[4] Case C-439/06

Data availability

8. The potential costs and benefits of ensuring third party access to licence exempt distribution networks is highly uncertain. Precisely because these networks are licence-exempt, the evidence base is thin. This means that it is difficult to know how wide the sector is, the degree to which they already provide third party access, the likelihood of customers switching and the potential savings to be achieved. The Call for Evidence preceding the current consultation[5] on providing third party access has delivered some anecdotal evidence which in some cases varies considerably between consultees and for the most part highlighted the limited information about this sector. This is shown in the table below.

Issue	Call for evidence responses
Scale of the Licence Exempt Sector	The scale and range of the networks is vast. Their type and scale vary considerably. Intuitively large (station, airport, universities, retail and office environments). Examples: Network Rail supplies 130,000 MWh at over 1,000 supply points per annum; Bristol Port supplies 40,000 MWh per annum. 65% of commercial property is rented. The majority of offices and retail units are multi-let, and therefore have private wire networks with the building used to supply energy to those occupiers. In the domestic sector the majority of social occupiers and private renters would be able to choose their energy supplier.
Evidence of prices charged by licence exempt electricity network operators relative to suppliers commercial tariffs	Variable. Some operators use the exempt network to generate additional profits.
Revenue levels and profitability	Across all sectors this is unknown. Example: Network Rail £10 million revenue (£10,000 per annum per supply point)
To what extent is third party access already provided	Variable. Opt in / opt out application can already exist. Other operators can provide full settlement metering. Fairly limited at the moment. Bristol Port already grants third party access to two large consumers.
How many customers in a licence exempt network would consider switching and what would be the costs	The number of customers that would opt out is difficult to estimate. The costs cannot be estimated as these would vary considerably with the complexity of the engineering works and admin burden. Unknown – hopefully none. Unlikely as they would lose on-site benefits.
What are the potential cost savings to consumers from switching	It would vary from case to case (up to 15%). None, only cost disbenefits. Smaller customers would benefits, but level unknown. Near zero. Unit cost of electricity may be lower. Ofgem review of distributed energy suggested there would be considerable cost disadvantages in brining schemes under full governance arrangements and the same might be expected to apply in this case. Savings would be negative.
Impact on current business operation	Solutions do not seem to bring any tangible business opportunity for suppliers. Expand the need for metering. Increased management, metering and administration costs for operators. Example: Network rail - £750k-£1.5m in meter installation costs plus £75k per annum additional operational costs.

[5] This is the consultation on the provision of Third Party Access to licence exempt electricity and gas undertakings. published by DECC in 2010.

9. Based on the evidence gathered, we have used the following basic assumptions on the scale of the sector:

- Of 93TWh of non-domestic, non-industrial electricity consumption (DUKES 2010) half is supplied through private networks. The total electricity supplied via licence exempt distribution networks is therefore assumed to be 47TWh. This assumption is consistent with the evidence presented by the British Property Federation that 65% of all commercial property is rented and that the majority of this relies on private wires for the supply of electricity.

- The average annual consumption per supply point is 90 MWh, in line with the evidence presented by Network Rail. The total number of supply points is therefore assumed to be 520,000.

- The price of energy (excluding network costs) for these consumers is the average price paid by consumers in the 20-500MWh per annum bracket. The Eurostat average for 2008-2010 of £98 per MWh excluding taxes is used.

- A simplified assumption of a switching rate of 13% is made, consistent with the Ofgem Energy Supply Probe[6] (paragraph 10.3) findings for small businesses. This rate may be a bit low as the introduction of Green Deal and smart meters could increase the switching rate. However, customers in a private network may find it more difficult to switch than customers in a licensed network. Therefore, on balance we have maintained the 13% switching rate.

- Customers switching supplier are estimated to receive an estimated 6% price savings through increased competition. This is in line with evidence from Ofgem's 2008 Supply Probe, which showed that this is the average saving customers could make switching away from the incumbent regional supplier.

- An assumption has been made that those customers switching would receive an advanced smart meter rather than a standard meter. The Government's roll-out of smart meters is implemented through a modification of licences, so licence exempt distribution networks would not be covered by the smart meter roll-out programme. However, given the Government's roll-out programme of smart meters, we believe it is reasonable to assume that standard meters are unlikely to be provided going forward, and that switching consumers would receive a smart meter. The advanced smart meter is more expensive than the normal smart meter (see "costs" below), so this would provide an estimated maximum cost. It may be likely that some customers may choose an ordinary smart meter than an advanced one so costs may be lower. The DECC Smart Meter impact assessment[7] has a central case that assumes smart/advanced meters will bring savings through a reduction in energy consumption of 2.8%. However, in that impact assessment when calculating the energy savings from the smart meter roll out, the 2.8% savings was not applied directly to initial energy consumption. A deduction of 0.25% was made to take account of the existence of better billing policies, so the net saving from smart meter installation is actually 2.55%. Therefore, we have applied 2.55% energy savings in this IA[8] where we assume that full settlement meters are installed.

Options for compliance

10. The Government has proposed the following models for compliance with the requirements:

(1) Commercial agreement – the customer's chosen supplier enters into a commercial agreement with the private network operators.
(2) 'Deemed' metering – without installing a full settlement meter for any customer, an administrator deems readings for each customer, which are then used by suppliers to charge.

[6] http://www.ofgem.gov.uk/Markets/RetMkts/ensuppro/Documents1/Energy%20Supply%20Probe%20-%20Initial%20Findings%20Report.pdf
[7] http://www.decc.gov.uk/assets/decc/Consultations/smart-meter-imp-prospectus/222-ia-smart-roll-out-non-domestic.pdf
[8] Note that, in the consultation-stage Impact Assessment, we assumed 2.8% energy savings, where full settlement meters are installed

(3) Opt in / opt out – customers are able to switch to a supplier of their choice or default to existing arrangements if not. For 'opt out' customers a full settlement meter would be installed.
(4) Full settlement metering – installation of full settlement metering for all end customers within the private network.

11. It is for the customer, supplier and distributor to agree which is the most practical option depending on individual circumstances. Not all of the options will work in all of the cases – e.g full settlement metering may not be possible in a multi-tenancy building where one customer's rented space isn't easily physically separate. These options are attempts to offer different ways of demonstrating that third party access has been properly applied and that between them cover all possible scenarios. If there are any disputes over the third party options between the network owner and a customer, then it would be for Ofgem to resolve this dispute.

Approach to costing

12. The proposed approach to ensuring compliance does not go beyond the minimum requirements of the Citiworks ruling. Providing businesses with a menu of compliance options will enable them to choose the lowest cost option depending on their circumstances and risk profile. This impact assessment aims to assess the costs of compliance and so measures costs and benefits against a counterfactual whereby the Citiworks ruling had not been made.

13. The benefits from competition (i.e from customers switching to new suppliers, with lower energy tariffs) are treated as a resource saving. In reality they are a mix of a transfer from producer to consumer surplus and a resource saving associated with a reduced deadweight loss. In the case of relatively inelastic electricity demand the transfer component will account for a larger share of the gains from competition. However, there are also likely to be allocative efficiency savings from the transfer from producer to consumer surplus. Increased competition will also lead to lower costs and improved productivity within firms. This increased productivity comes from "within firm" effects (increased managerial incentives to bear down on costs) and "between firm" effects (exit from the market of lower productivity firms and the entry of higher productivity firms).[9] It is therefore reasonable to treat these benefits as a resource saving. Note that our best estimate of costs and benefits, however, assumes no benefit to consumers from switching.

14. Finally, the impact assessment only attempts to cost the impact on licence exempt electricity networks. However, the ruling also applies to licence exempt gas networks. The informal Call for Evidence undertaken prior to our October consultation included questions on the extent of licence exempt gas networks and likely impacts of the Citiworks ruling on them. The conclusion is that electricity licence exempt networks are much more pervasive (only two out of twenty respondents owned or represented parties owning licence exempt gas networks) and most of the costs and benefits of complying with the Citiworks ruling will fall on them.

Distributional effects

15. Evidence received from Ofgem suggests that as business and commercial energy customers are diverse, the distribution of consumption among non-domestic, non industrials is likely to be skewed to the right. This means that the analysis of impacts for the average consumer is fairly unrepresentative of the impacts on most non-domestic and non-industrial customers. It could overstate the size of any impact for most customers since they use less than average energy in a skewed distribution. They are likely to have different motivations with regards to the effort they make in managing and reducing energy costs.

16. The impacts of third party access will fall differently across customers depending on their characteristics. However, due to the lack of an evidence base around customer segmentation it is difficult to explore some of these distributional impacts within non-domestic and non-industrial groups further.

[9] The theoretical and empirical literature is summarised in *Productivity and competition : an OFT perspective on the productivity debate*, January 2007.

Costs

17. The main costs associated with providing third party access to these networks are those associated with metering. These costs would vary substantially across the compliance models above.

18. Member States are required to ensure the implementation of a system of third party access to gas and electricity transmission and distribution systems based on published tariffs, applicable to all eligible customers and applied objectively and without discrimination between system users. Tariffs, or the methodologies underlying them, are required to be approved prior to their entry into force by Ofgem, as the national regulatory authority. Ofgem estimate that the annual cost of having to approve tariffs and methodologies is about £71,000 in current prices and £1m present value to 2030. This is based on average estimated annual instances. This £1m has been included in the costs for each of the options below.

19. In line with the evidence included in DECC's impact assessment on the roll out of smart and advanced meters to small and medium sized businesses in July 2010[10], the cost of installation of an advanced smart meter for full settlement metering across all supply points would be £383 per meter. This cost is likely to be an overestimate, as a large proportion of consumers within licence-exempt networks are unlikely to need advance meters and could choose to have the cheaper standard smart meter installed instead. Asset and installation costs of standard non-domestic smart-meters are expected to be just £72. It seems appropriate to use the conservative higher-cost assumption, particularly in light of the fact that the only respondent providing a cost estimate for meter installation quoted a figure of at least £500 per meter. However, it is worth highlighting that the installation of meters is not a necessary requirement for compliance, but is merely an option open to the network owners and its customers (the latter would be expected to bear the costs of the meters).

20. The cost of full installation of advanced meters then gives a cost estimate of £200m. We assume across the board full settlement metering would not lead to any additional operational costs.

21. The commercial agreement and 'deemed' metering models would incur additional operational costs for those customers demanding supply from a third party. Network Rail's response to the call for evidence assumes these to be about £50 per annum. Assuming 13% of customers wanted to switch suppliers, the additional cost of these models would be £3.45m per annum - £49m in present value terms to 2030.

22. The costs associated with the "opt in / opt out" model are in between these two estimates. Full settlement metering would be required for those customers wanting to switch (and only for those customers wanting to switch) and the additional operational costs would still be incurred. Thus, the costs associated with this model would be the £49m above plus the cost of providing full settlement meters for customers demanding third party supply, estimated at £26m – a total cost of £75m in present value terms.

Other cost issues

Reducing incentives to build networks

23. The costs associated with providing third party access to licence exempt networks would, other things being equal, reduce the incentives to build the networks. This could result in additional resource costs to society as alternative, more costly, arrangements for energy supply might have to be made. However, given that these networks are generally provided as part of a broader package of services we assume for the purpose of this impact assessment that this impact is negligible.

Sizeable start-up costs

24. Two of the options: the opt in/opt out and full settlement metering, are proven and market ready therefore the costs are more easily identified. The other two options: contracting and deeming, have

[10] http://www.decc.gov.uk/assets/decc/Consultations/smart-meter-imp-prospectus/222-ia-smart-roll-out-non-domestic.pdf

not been tested and could be subject to some significant transaction costs that need to be agreed between parties. The ad hoc nature of these alternative arrangements, along with the lack of certainty suppliers have about the licence exempt systems they are trying to gain third party access to, will probably mean that any such contracts or non-standard arrangements could be very case specific. This would suggest that they would have some sizeable start up costs as well as ongoing operational costs, which we cannot quantify due to lack of data.

Possible network upgrade costs

25. In their evidence, several ports authorities raised the issue of the increased cost of having to upgrade the private distribution network to make it IDNO (Independent Distribution Network Operator) compliant if a customer switches and a third party supplier is allowed access.

26. They stated that private networks do not currently have to be compliant to IDNO standard, but if third party suppliers are to be allowed to supply over their private network it is likely that such suppliers will require the network to be IDNO compliant, which would be extremely costly.

27. Ofgem has confirmed that private network owners would not be obliged to update their networks or become licensed distributors in order to allow third party access. Industry codes have requirements on distributors and the supplier/distributor relationship but as these private wire networks are not licensed then they wouldn't have to meet code requirements. The wires would still have to meet any safety requirements in legislation outside of industry codes and the distribution licence.

28. If private wire owners were unlicensed, then we assume their relationship with suppliers would be on a commercial basis. Suppliers are required, under the supply licence, to offer to supply a customer that requests it, unless it isn't reasonable for them to do so. Also, suppliers may refuse to make an offer to supply a customer if they have significant safety concerns. If a supplier doesn't have any safety concerns and is able to negotiate reasonable third party access terms with the private wire network owner, then a customer on this network should be able to receive an offer from this supplier.

Benefits

29. The main potential benefit from ensuring third party access is consumers could benefit from lower energy prices. The call for evidence responses are ambiguous on the extent to which these benefits are likely to be achieved.

30. A number of responses, mainly from licence exempt network operators, state that price savings to customers will be negative. Other responses suggest smaller businesses could benefit, with an energy supplier estimating savings of up to 15% would be available for those customers switching.

31. For the purposes of this impact assessment the range of price benefits from increased competition are therefore estimated to range from zero to 6% for those switching suppliers, estimated to be £37.4m per annum or £512m in present value terms to 2030. The 6% assumption is in line with evidence from Ofgem's 2008 Supply Probe, which showed that this was the average saving customers could make switching away from the incumbent regional supplier. The assumption is that licence exempt network owners might behave in a similar way to former regional incumbents. As discussed above, these benefits from competition are treated as a resource saving to society for the purposes of this impact assessment.

32. In our "best estimate" scenario, however, we do not include any benefits from price savings to those customers switching supplier. This is a conservative assumption, based on the uncertainty over whether these savings would be achieved in practice. Those customers already receiving a good price for their energy may be less likely to switch supplier.

33. Smart meters are also expected to play a role in enabling businesses to save energy. In order to be consistent with the impact assessment on the roll out of smart and advanced meters to small and

medium sized businesses, this impact assessment assumes that smart/advanced meters will bring net savings through a reduction in energy consumption of 2.55% (the Smart Meter IA central case). See the "assumptions" section above for more detail on this.

Environmental Benefits

34. Please note that our estimates of monetised benefits arising from energy consumption reduction (resulting from meter installation) differ from those made in the consultation-stage Impact Assessment. We have revised our estimates, in line with DECC/HMT appraisal guidance. In particular, we now value energy savings at the long-run variable cost of energy supply (rather than at the retail price) and also include benefits from reduced traded-sector emissions and improved air quality.

35. For the best estimate scenario, which is the 'opt in / opt out' option with 13% of customers switching with no price benefit but net saving of 2.55% energy consumption, there will be energy savings estimated at around 155,000 MWh per year. The net change in energy use, net change in emissions and net air quality impact have been included in the Net Present Value (NPV) figures.

TRADED SECTOR (EU ETS)	**(£ 2009, PV 2009)** *minus indicates a cost*
Net change in energy use	£182,903,013
Net change in emissions	£21,940,938
Net air quality impact	£3,200,526
TOTAL	£208,044,477

CHANGES IN CO2 EMISSIONS

(minus indicates an emissions saving)	**Total appraisal period** *(Mt CO2)*
Net emissions CO_2 in the traded sector	-1.227
Net emissions CO_2 in the non-traded sector	0.000

Carbon Budgets

UK GHG EMISSIONS

(Mt CO2)

(minus is a reduction in emissions)	**2008-2012**	**2013-2017**	**2018-2022**
Net change in CO_2 (traded)	-0.183	-0.305	-0.305
Net change in CO_2 (non-traded)	0.000	0.000	0.000

36. Policies that save energy (such as insulation), reduce energy bills and increase consumers disposable income, may in turn have the effect of leading to a greater consumption of energy. This is known as the "rebound effect". We have used in this IA the assumption of 2.55% net savings through a reduction in energy consumption, which has been taken from DECC's Smart Meter Impact Assessment. There were no assumptions made in the Smart meters IA about the rebound effect connected with the roll out of smart meters, so therefore we have not estimated the rebound effect in this IA.

37. The reasons for not applying any rebound effect to the energy savings from smart metering were:

- the assumed saving is at the lower range of savings from trials and international evidence it is derived from in the first place, and hence is deemed to be conservative enough;

- in contrast with other “measures” such as insulation, where a rebound effect is appropriate as no action is required from the household, the energy saving from smart metering actually relies on behavioural change and hence demands customer action, which means that the rebound effect argument does not directly apply to the same extent.

Net Present Value

38. Overall, the range for the NPV of these proposals goes from a net cost of £200m (with full settlement metering costs and zero benefits being delivered) to a net benefit of £1,230m (with the commercial and/or ‘deemed’ metering models being applied and maximum potential benefit of 15% price savings being achieved from competition).

39. Both these extremes appear unlikely. Firstly, because existing licence exempt networks will not choose the option of providing full settlement metering across the board (although new networks might choose this model). Secondly, because the 15% price saving seems like a potential maximum saving for some consumers, but not for the average consumer.

40. The range for the NPV presented in the summary sheets of this impact assessment is therefore given by the following scenarios (also summarised in the table below):

(1) A low benefit estimate given by the commercial/deemed metering model with no benefits being achieved. This results in costs of £49m in present value terms to 2030 or £3.45m per annum in current prices;

(2) A medium benefit estimate given by the ‘deemed’ metering and/or commercial agreement models with an average price saving of 6% per customer switching. This provides a present value cost of £49m and a benefit of £512m in present value terms or £37.4m per annum in current prices. This provides a net benefit of £463m in present value terms to 2030;

(3) A high benefit estimate given by the scenario in which the costs are equal to those of the opt-in/opt-out model and switchers achieve gains from competition resulting in 6% reduction in bill prices plus a 2.55% saving in energy consumption and environmental benefits. This results in costs to 2030 of £75m in present value terms or £5.3m per annum in current prices and benefits of £50.7m per annum in current prices and £720m in present value terms to 2030. A net present value of £645m to 2030;

(4) A best estimate of the net present value is given by the scenario where the costs are equal to those of the opt-in/opt-out model, with switchers receiving no price benefit but saving 2.55% in energy consumption and environmental benefits. This results in the best estimate for costs of £75m in present value terms and a best estimate for total benefits of £208m in present value terms, or £14.65m per annum in current prices. Thus, our point estimate for the NPV of these measures is a net benefit of £133m to 2030. In our “best estimate” scenario, we do not include any benefits from price savings to those customers switching supplier. This is a conservative assumption, based on the uncertainty over whether these savings would be achieved in practice.

Costs and benefits, Present Value, £ million, 2010-30			
	Costs	**Benefits**	**NPV**
Low benefit scenario: Commercial/deemed metering, switchers achieve no reduction in bills	49.0	0	-49.0
Medium benefit scenario: Commercial / deemed metering, switchers achieve 6% reduction in bill prices	49.0	512.0	463.0
High benefit scenario: Opt in / opt out, switchers achieve 6% reduction in bill prices and 2.55% saving in consumption	75.0	720.0	645.0
Best estimate scenario: Opt in / opt out, switchers achieve no price benefit but save 2.55% in energy consumption	75.0	208.0	133.0

Competition impact

41. The Office of Fair Trading's guidance, "Completing competition assessments in impact assessments", suggests answering the following four questions to determine whether the proposal will have a significant impact on competition. http://www.oft.gov.uk/shared_oft/reports/comp_policy/oft876.pdf

    - Directly limit the number or range of suppliers?
    - Indirectly limit the number or range of suppliers?
    - Limit the ability of suppliers to compete?
    - Reduce suppliers' incentives to compete vigorously?

42. The Citiworks Provision of Third Party Access to Licence Exempt Networks proposals for the EU Third Package, does not limit the number of suppliers, limit the ability of suppliers to compete nor reduce their incentives to compete vigorously.

43. The provision of third party access to private networks may lead to an increase in competition because customers will be able to switch supplier. Based on evidence from Ofgem's 2008 Supply Probe, we have made an assumption of 6% price savings from increased competition for those customers switching supplier. Ofgem found that this was the average saving customers could make switching away from the incumbent regional supplier. The assumption is that licence exempt network owners might behave in a similar way to former regional incumbents. Further details have been set out in the benefits section of this impact assessment.

44. Forth Ports have also informed us in their evidence that they undertake regular competitive tendering of energy supply contracts for its private electricity networks. They believe that this provides a good deal for their customers, as they are able to obtain cheaper energy. Therefore, because their customers receive a good deal on energy prices, they may be less likely to switch to another supplier.

45. Due to the uncertainty over whether any price savings would be achieved in practice, we have decided not to include any benefits from price savings to those customers switching supplier in our best estimate scenario.

Human Rights

46. To the extent that human rights may be engaged, we consider the approach to be compatible with the Human Rights Act 1998.

Justice System

47. The Third Package is broadening the scope of obligations on gas and electricity undertakings and hence Ofgem's enforcement regime. As part of this regime, we are extending the scope of civil and criminal offences therefore there is a likely impact on courts' resources.

Equality

48. We are not requiring exempt suppliers to provide information to their customers in a format that caters for the disabled, blind people or speakers of other languages This info is intending to assist them. Consumer Focus is available to assist consumers on energy related issues. Energy customers are also able to switch to another energy supplier.

Specific Impact Tests

49. Competition, environmental benefits, human rights, justice and equality impacts have been considered. No additional impacts are expected on small firms, gender, health, legal aid, sustainable development or the rural economy.

Annex 1: Post Implementation Review (PIR) Plan

50. Please refer to the over-arching Impact Assessment.

Basis of the review: [The basis of the review could be statutory (forming part of the legislation), it could be to review existing policy or there could be a political commitment to review];
Review objective: [Is it intended as a proportionate check that regulation is operating as expected to tackle the problem of concern?; or as a wider exploration of the policy approach taken?; or as a link from policy objective to outcome?]
Review approach and rationale: [e.g. describe here the review approach (in-depth evaluation, scope review of monitoring data, scan of stakeholder views, etc.) and the rationale that made choosing such an approach]
Baseline: [The current (baseline) position against which the change introduced by the legislation can be measured]
Success criteria: [Criteria showing achievement of the policy objectives as set out in the final impact assessment; criteria for modifying or replacing the policy if it does not achieve its objectives]
Monitoring information arrangements: [Provide further details of the planned/existing arrangements in place that will allow a systematic collection systematic collection of monitoring information for future policy review]
Reasons for not planning a PIR: European Court of Justice ruling. Not complying not an option.