

Title: Third Package: Transmission and Distribution Networks Lead department or agency: Department of Energy and Climate Change Other departments or agencies:	Impact Assessment (IA)
	IA No: DECC0005
	Date: 14/01/2011
	Stage: Final
	Source of intervention: EU
	Type of measure: Legislation
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Summary: Intervention and Options

What is the problem under consideration? Why is government intervention necessary? Articles 9-11 of the Third Package Electricity and Gas Directives and Article 3 of the Electricity and Gas Regulations introduce new unbundling requirements on transmission system owners (TSOs). These articles affect existing electricity and gas transmission systems, interconnectors, and the new Offshore Transmission Operators (OFTOs). Article 26 of the Directives places further unbundling requirements on Distribution System Operators (DSOs). Provisions are also made for exemptions to be granted to Closed Distribution System (CDS) operators (Article 28). 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 two primary network-related objectives of the Third Package are to: (a) Improve market competition through better regulation, unbundling and reducing asymmetric information; and (b) Improve security of supply by strengthening the incentives for sufficient investment in transmission and distribution networks. In the area of transmission and distribution networks the GB gas and electricity arrangements are already largely compliant with the Third Package.	
What policy options have been considered? Please justify preferred option (further details in Evidence Base) The minimum compliance option has been assessed throughout. It represents the Government's preferred option, as it ensures compliance with EU law at minimum cost to Government, regulator and industry. The preferred option will include the following measures: - Legislation and licence changes to allow for Ofgem certification of TSOs, including derogations under Article 9. Some modifications might also be required with respect to interconnectors and OFTOs. - The Ofgem certification process itself, which will apply to all existing TSOs, interconnectors and OFTOs. - Licence modifications and additional information gathering powers for Ofgem to ensure full compliance with the new requirements.	
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

Description:

Implement the minimum-compliance option for all measures.

Price Base Year 2010	PV Base Year 2011	Time Period Years 1	Net Benefit (Present Value (PV)) (£m)		
			Low: n/a	High: n/a	Best Estimate: -0.85

COSTS (£m)	Total Transition (Constant Price) 1 Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	n/a	n/a	n/a
High	n/a	n/a	n/a
Best Estimate	0.85	n/a	0.85

Description and scale of key monetised costs by ‘main affected groups’

Administration and legal costs to TSOs associated with the TSO certification process, particularly where derogations are requested. Small administrative cost likely to Ofgem but not costed. Certification process has been costed for 25 TSO applications and the expected three derogation applications. Licensees might also experience some administration costs in making an application which might be one to twenty times the application fee costs. These have been included in calculations.

Other key non-monetised costs by ‘main affected groups’

Legal and administration costs associated with legislation changes and licence modifications to ensure compliance with TSO and DSO unbundling requirements.

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

Description and scale of key monetised benefits by ‘main affected groups’

No monetised benefits expected.

Other key non-monetised benefits by ‘main affected groups’

Minimal, as GB is already largely compliant. Full compliance could lead to small gains in terms of more efficient networks (less congestion, more investment), decreased market concentration leading to lower energy prices for consumers, and higher innovation in the energy sector. The likely extent of these benefits is small, as under 10% of GB transmission assets are not already fully ownership unbundled and the EC acknowledges that the GB system exceptions (e.g. electricity transmission in Scotland) function well.

Key assumptions/sensitivities/risks

Discount rate (%)

Assumption 1 That no significant adjustments to ownership structures are required.

Assumption 2: Interests of financial investors (including step in rights) are protected by approach to drafting.

Assumption 3: Prohibition on exercise of shareholder rights is dealt with in a proportionate way.

Key risk: That investors are deterred if they are not able to exercise their rights in transmission and distribution businesses in the ways that they would expect.

Impact on admin burden (AB) (£m):		Impact on policy cost savings (£m):		In scope
New AB: n/a	AB savings:	Policy cost savings: n/a		no
	Net: n/a			

Enforcement, Implementation and Wider Impacts

What is the geographic coverage of the policy/option?	Great Britain				
From what date will the policy be implemented?	03/03/2011				
Which organisation(s) will enforce the policy?	Ofgem, EC				
What is the annual change in enforcement cost (£m)?	Small administrative costs 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: n/a		Non-traded: n/a		
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: n/a		Benefits: n/a		
Annual cost (£m) per organisation (excl. Transition) (Constant Price)	Micro	< 20	Small	Medium	Large
Are any of these organisations exempt?	Yes	Yes	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	No	
Economic impacts		
Competition Competition Assessment Impact Test guidance	Yes	10
Small firms Small Firms Impact Test guidance	No	
Environmental impacts		
Greenhouse gas assessment Greenhouse Gas Assessment Impact Test guidance	No	
Wider environmental issues Wider Environmental Issues Impact Test guidance	No	
Social impacts		
Health and well-being Health and Well-being Impact Test guidance	No	
Human rights Human Rights Impact Test guidance	No	
Justice system Justice Impact Test guidance	No	
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	DECC call for evidence: http://www.decc.gov.uk/en/content/cms/consultations/eu_energy_mkt/eu_energy_mkt.aspx
2	EC Third Package Impact Assessment: http://ec.europa.eu/energy/gas_electricity/interpretative_notes/doc/2007_09_19_impact_assessment.pdf
3	Transmission Price Control Review 2007-12: http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=191&refer=Networks/Trans/PriceControls/TPCR4/ConsultationDecisionsResponses
4	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	0.85									
Annual recurring cost	-									
Total annual costs	0.85									
Transition benefits	-									
Annual recurring benefits	-									
Total annual benefits	-									

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



Microsoft Office
Excel Worksheet

Evidence Base (for summary sheets)

1. Issue

1. Articles 9-11 of the Third Package Electricity and Gas Directives and Article 3 of the Electricity and Gas Regulations introduce new unbundling requirements on transmission system owners (TSOs). These articles affect existing electricity and gas transmission systems, interconnectors, and the new Offshore Transmission Operators (OFTOs). Article 26 of the Directives places further unbundling requirements on Distribution System Operators (DSOs). Provisions are also made for exemptions to be granted to Closed Distribution System (CDS) operators.
2. All Member States have to comply with EU legislation and therefore GB needs to transpose the requirements into UK law.
3. The two primary network-related objectives of the Third Package are to:
 - (a) Improve competition through better regulation, unbundling and reducing asymmetric information; and,
 - (b) Improve security of supply by strengthening the incentives for sufficient investment in transmission and distribution capacities.
4. In the area of transmission and distribution networks, the GB gas and electricity arrangements are already largely compliant with the Third Package.

2. Articles and description of options considered

5. The minimum compliance option has been assessed throughout. It represents the Government's preferred option.

a) Transmission unbundling

6. The Third Package requires full ownership unbundling of transmission assets. However, article 9 allows for three derogation options:
 - (a) The Independent System Operator (ISO) model: where, on 3 September 2009, the transmission system was part of a vertically integrated undertaking (VIU), the Member State may designate an ISO. Such an ISO would act as the system operator and would have, for example, independent responsibility for investment planning and management of third party access. The TSO would provide support, including through finance for investments identified by the ISO.
 - (b) The Independent Transmission Operator (ITO) model: where, on 3 September 2009, the transmission system was part of a VIU, the TSO may remain part of the owning company. However, the TSO will need to comply with stringent rules on ring-fencing to ensure that it is completely independent from the rest of the VIU.
 - (c) Arrangements providing greater independence than the ITO model: where, on 3 September 2009, the transmission system was part of a VIU and there are arrangements in place that guarantee more effective independence of the TSO than the ITO model, a Member State may decide to apply the ownership unbundling derogation.

There are a number of companies that might seek such derogations:

7. Scottish TSOs (SPET and SHETL): When the single GB energy market (BETTA) was created Scottish Power and SSE retained ownership of their transmission assets. These vertically integrated companies also own distribution, generation and supply businesses. There are, however, important regulatory safeguards to promote competition and efficient network operation including a single system operator (National Grid) and industry codes, overseen by Ofgem, governing such issues as investment and network access. Having multiple transmission owners provides the

regulator with important comparators in agreeing network investment and pricing and a potential competitive element in delivering new infrastructure. Whilst transmission assets could not now be included in vertically integrated ownership structures we do not believe that they have been a barrier to the development of a competitive market.

8. Interconnector UK (IUK): Although no one has a controlling interest in the company, the unbundling text of the Directives still catches minority shareholders.

Certification

9. The derogations listed above will be granted by Ofgem, as National Regulatory Authority, but will also have to be approved by the European Commission. They will form part of the **TSO certification process** described in articles 10 and 11 of the Electricity and Gas Directives. Part of the certification process will need to be reflected in legislation with some of the detail included in licences.
10. The Government's final proposals are that:
 - Ofgem will be the certification authority (and NIAUR in Northern Ireland).
 - The ITO model will be made available for gas inter-connectors only. The Government's view is that this will provide important flexibility to enable Ofgem and the regulatory authorities in other Member States to arrive at consistent cross-border regulatory arrangements.
11. TSO certification will be required for existing electricity and gas TSOs, interconnectors and OFTOs.

b) Distribution unbundling

12. Article 26 of the Electricity and Gas Directives highlights some additional unbundling requirements for Distribution System Operators (DSOs). DECC and Ofgem's analysis together with the responses to the call for evidence suggest that GB is largely compliant in this area.

3. Benefits

a) Transmission unbundling

13. The EC Impact Assessment (pp. 33-45) highlights the following broad categories of benefits from full ownership unbundling:
 - greater investment in the network – e.g. the EC IA finds that in markets with ownership unbundled TSOs, investment in interconnectors as a proportion of congestion revenues is double that in markets without full unbundling (33% compared to 17%), in turn leading to less congestion.
 - reduced market concentration – “average market shares of the largest generator were in 2005 in Member States with legal unbundling 73% versus 47.7% in Member States with ownership unbundled TSOs”.
 - lower energy prices for domestic and industrial consumers – for industrial consumers “the price difference between the two country samples over the entire period of nine years was thus 9% in favour of Member States with ownership unbundling”; for household electricity users the difference was 24% in favour of Member States with ownership unbundling.
 - greater levels of research and innovation in the electricity sector – “while it is difficult to attribute increased research expenditures to single factors, open competitive markets seem to support innovation and research in energy”.
14. The association between ownership unbundling and these positive outcomes is therefore strong and significant. Caution, however, should be exercised in interpreting these results – whereas the EC Impact Assessment does demonstrate a strong association, it does not conclusively prove a causal link.

Transmission Owner	Regulated Asset Value (RAV), at close 2006/07	Share of total transmission RAV
National Grid Electricity Transmission (NGET)	£5,416m	57.3%
National Grid Gas NTS (NGG)	£2,981m	31.5%
Scottish Power Transmission Ltd (SPTL)	£288m	3.0%
Scottish Hydro Electricity Transmission Ltd (SHETL)	£764m	8.1%

Source: Ofgem Transmission Price Control Review (2007-12)

15. However, even if GB transmission assets are not fully unbundled the extent to which the UK will benefit from the Third Package is limited by two factors. Firstly, the large majority of transmission assets are unbundled: the entire gas transmission network is fully ownership unbundled and the entire electricity network in England and Wales is ownership unbundled. It is only the Scottish electricity TSOs that are not ownership unbundled, representing less than 10% of the total transmission Regulated Asset Value (RAV). In the case of Scotland, the System Operator function is independent, ensuring access, charging and other activities take place on a non-discriminatory basis.
16. The effectiveness of the current arrangements in Scotland is also recognised in the EC Impact Assessment (p. 41).
17. “SP and SSE promote the ISO solution while NG, Ofgem and the UK Department of Trade and Industry express a more reserved position. A common criticism is that the ISO is only a second best solution to ownership unbundling and only functions reasonably well in Scotland because some particularities:
- (i) *The Scottish electricity market is relatively small and largely isolated from the rest of the UK. The grid is therefore relatively easy to manage;*
 - (ii) *NG is an experienced, ownership unbundled TSO in the neighbouring area guaranteeing its independence and preventing “cross-border” problems and*
 - (iii) *Ofgem is a strong regulator closely monitoring the relationship between the ISO and the asset owners.”*
18. Having said that, three responses to the call for evidence (from National Grid, one of the Big Six, and an independent DSO) support full unbundling, whereas only SSE and Scottish Power argued in favour of the current system. This suggests that there might be some additional competition gains to be had from full unbundling in the GB market.
19. In DECC’s consultation on implementation of the EU Third Package, the Government was minded not to make the ITO model available as it may not be compatible with GB market arrangements. The Government’s view was that the ITO model does not guarantee independence as effectively as the arrangements in the GB on-shore system. As noted above, the onshore gas and electricity systems are either fully ownership unbundled or benefit from a separate System Operator function that ensures access, charging and other activities take place on a non-discriminatory basis.
20. However, consultees have made the case for the ITO model for gas inter-connection. These arguments are based on potentially higher costs of transition to other Third Package compliant models, as well as the need to ensure that regulators in each of the responsible Member States have maximum flexibility to reach agreement and ensure consistent cross-border regulatory arrangements. The Government agrees that there is a case for the ITO model to be available in these circumstances, and proposes to make the ITO model available for gas interconnectors only. Electricity interconnection is fully ownership unbundled.

b) Distribution unbundling

21. The EC Impact Assessment (pp. 57-58) suggests that “as with TSOs, the more effective unbundling of DSOs would in principle contribute to the creation of a level playing field at the retail level, mainly by eliminating incumbents’ information advantages, preventing cross-subsidies and ensuring fair network access and transparent customer switching procedures... [It] would thus contribute to the contestability of the retail market and thus facilitate market entry by third party suppliers”, leading to lower prices for consumers.
22. Article 26 of the Electricity and Gas Directives highlights some additional unbundling requirements for Distribution System Operators (DSOs). DECC and Ofgem’s analysis together with the responses to the call for evidence suggest that GB is largely compliant in this area.

4. Costs

a) Transmission unbundling

Implementation costs

23. These relate to putting in place legal and administration arrangements to implement the Third Package.
24. There may be some small additional administration costs for Ofgem regarding certifying TSOs in line with the processes set out in the Package, enforcement costs or costs associated with facilitating the consultation of system users. These costs are unlikely to be material, although Ofgem will be in a better position to assess these costs after transposition of the Directive.
25. There would be additional administration costs to licensees. Application fees for licences, as charged by Ofgem, tend to cost between £350 and £1,050.²
26. In addition to the cost of the licence, licensees might also experience some administration costs in making an application which might be one to twenty times the application fee costs. (This is based on the estimated cost of applying for a gas transporter licence.) Applying these costs to the approximately 25 companies that may require TO certification (including current gas and electricity TOs, interconnectors and OFTOs), would imply an additional administrative burden to the private sector in the range of £17,500 to about £550,000.
27. For those seeking derogations we expect costs to be higher, potentially in the range of £100k per derogation – a cost broadly equivalent to that assumed for existing OFTOs to engage in the development of the new offshore regime in the March 2009 Offshore Electricity Transmission Impact Assessment. As three TOs are expected to seek derogations, the derogation costs are estimated at £300,000.
- 28. Therefore, the total cost of the certification process is estimated at around £850,000.**

Enforcement and monitoring cost issues

29. On transmission ownership unbundling we would expect a low level of enforcement/monitoring post-certification. The areas that could arise are changes in ownership (not strictly enforcement, but will need monitoring) and transmission companies’ compliance with undertakings that they give, such as rights in other energy interests. On the latter, we think there will be little or no activity as previous experience has indicated that once the governance and separation is established at the outset, then compliance rates are very high.

² <http://www.ofgem.gov.uk/Licensing/Work/Documents1/SupplementaryAppendix2-Guidanceforgasnd0electricityapplications.pdf>.

Other cost issues

30. In their response to the call for evidence, SSE suggested that there are potential costs in terms of additional risk and uncertainty for required transmission investments associated with moving towards a different ownership unbundling regime as part of Ofgem's certification process.
31. However, the evidence of recent European experience in ownership unbundling presented in the EC Impact Assessment suggests that the commercial and investment risks associated with unbundling tend to be overplayed. The EC find (p. 35) that "shareholders have in fact in almost all cases benefited from increasing share prices during and after the ownership restructuring". Moreover, there is "some evidence against the common view that the predictable revenue stream of the network business makes a vertically integrated companies [sic] less risky than a company without network assets, allegedly giving it cheaper access to investment capital".
32. Overall, the Commission do not find any negative impact on security of supply as a result of reduced network investment likely to arise from the proposed measures. It is worth restating the caveat that this conclusion is reached without having established a robust counterfactual – in other words, we do not know whether these companies would have done even better in terms of their value and credit-worthiness in the absence of unbundling.

b) Distribution unbundling

33. As distribution unbundling is an existing requirement and has already been implemented, there should not be any additional costs. All companies are compliant so we do not envisage any monitoring or enforcement activity.

5. Competition impact

34. 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.³ Will the proposal:
 - 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?
35. The unbundling proposals for transmission and distribution systems in 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.
36. As the large majority of transmission assets are already unbundled, the extent to which the UK can benefit is limited. It is only the Scottish electricity TSOs that are not ownership unbundled, representing less than 10% of the total transmission Regulated Asset Value.
37. However, three responses to the call for evidence (from National Grid, one of the Big Six, and an independent DSO) support full transmission unbundling, whereas only SSE and Scottish Power argued in favour of the current system. This suggests that there might be some additional competition gains to be had from full unbundling in the GB market.
38. The EC Impact Assessment (pp. 57-58) suggests that like TSOs, the more effective unbundling of DSOs could contribute to the creation of a level playing field at the retail level. This would be through eliminating incumbents' information advantages, preventing cross-subsidies and ensuring

³ http://www.offt.gov.uk/shared_offt/reports/comp_policy/oft876.pdf

fair network access and transparent customer switching procedure. This would contribute to the contestability of the retail market and thus enable market entry by third party suppliers, leading to lower prices for consumers.

6. Human Rights

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

7. Risks

40. A number of call for evidence responses raise concerns about the fact that the Third Package precludes undertakings with ownership of energy supply, generation or production from owning shares in an unbundled TSO and any subsequent voting rights associated with that share ownership.
41. National Grid, for example, “is particularly concerned about the efficacy, costs and complexity of any rules which might be used to implement the unbundling regime, in the manner contemplated”, by the Commission. “It is not clear how shareholders of network operators might be identified as being, for example, suppliers, or how they might be prohibited from voting. It would seem [...] sub-optimal to impose obligations on such shareholders and is not in keeping with the transmission independence which already exists in GB”.
42. We plan to implement these provisions in a way that is as light touch as possible. Please refer to Chapter 3 in the Government Response.

Annex 1: Post Implementation Review (PIR) Plan

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

<p>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];</p>
<p>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?]</p>
<p>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]</p>
<p>Baseline: [The current (baseline) position against which the change introduced by the legislation can be measured]</p>
<p>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]</p>
<p>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]</p>
<p>Reasons for not planning a PIR: [If there is no plan to do a PIR please provide reasons here]</p>