Title: Amendments to the Ownership Unbundling Provisions of The Electricity Act 1989 and Gas Act 1986

Lead department or agency:
Department of Energy and Climate Change (DECC)

Other departments or agencies: Impact Assessment (IA)

Date: 17/12/2014
Stage: Final
Source of intervention: Domestic
Type of measure: Secondary legislation
Contact for enquiries:
pauline.spetsioti@decc.gsi.gov.uk
anthony.moulds@decc.gsi.gov.uk
0300 068 6978

Summary: Intervention and Options

RPC: GREEN

Cost of Preferred (or more likely) Option

<table>
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<tr>
<th>Total Net Present Value</th>
<th>Business Net Present Value</th>
<th>Net cost to business per year</th>
<th>In scope of One-In, One-Out?</th>
<th>Measure qualifies as</th>
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</thead>
<tbody>
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<td>Zero</td>
<td>Zero</td>
<td>Yes</td>
<td>Zero Net Cost</td>
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What is the problem under consideration? Why is government intervention necessary?
Gas and electricity Transmission System Operators (TSOs) need to comply with the EU Third Energy Package ownership unbundling rules as transposed into GB legislation and be certified by Ofgem as in compliance with these rules. There is concern that the current transposition of the ownership unbundling requirements might be unduly constraining investment and that the lack of discretion available to Ofgem may mean that they are unable to certify cases that do not present any risk of discriminatory treatment.

There is also evidence that GB unbundling rules are less flexible than those applied in some other Member States. The Commission has published a working document that sets out the approach it is taking to certification, which allows for a more flexible approach.

Following a call for comments, the Government is proposing to amend the GB ownership unbundling rules in order to introduce further flexibility to Ofgem's consideration of certification cases that do not present a risk of discrimination, in the form of a new discretionary power to treat one or more of the five ownership unbundling tests as passed.

What are the policy objectives and the intended effects?
The policy objectives are to:
- retain ownership unbundling rules but allow for a more flexible approach to be taken by Ofgem in considering certification cases;
- retain the risk of discrimination as a hurdle to the common control of networks and interests in power generation, gas production and electricity and gas supply;
- avoid perverse or disproportionate outcomes;
- supports investment and provides investors with clarity on what is and is not certifiable;
- avoid creating uncertainty for those already certified or any need to revisit those cases (assuming no change in circumstances).

The overall intended effect is to encourage efficient investment in UK energy infrastructure. This would mean, for example, that Ofgem will have the power to decide that the TSO should be certified (subject to consideration of their statutory duties) businesses where an investor (e.g. pension fund) has a diverse portfolio and can demonstrate to Ofgem's satisfaction that the structure has no incentive or ability to discriminate. Ofgem will decide on a case by case basis whether there is a risk of discrimination.
What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)

Two main policy options have been considered:

- **Option 1:** The baseline, 'do nothing' option. Transmission businesses would continue to be certified by Ofgem under the existing ownership unbundling provisions of the Electricity Act 1989 and Gas Act 1989.

- **Option 2:** Amend the ownership unbundling provisions of the Electricity Act 1989 and Gas Act 1989. Under this option DECC will introduce further flexibility to Ofgem’s consideration of certification cases that do not present risk of any harmful outcome, thus promoting investment whilst retaining the overall aims of the EU Directives ownership unbundling requirements. This is the preferred option as it meets the policy objectives in a proportionate manner.

**Will the policy be reviewed?** It will be reviewed. **If applicable, set review date:** 2016

| Does implementation go beyond minimum EU requirements? | N/A |
| Are any of these organisations in scope? If Micros not exempted set out reason in Evidence Base. | Micro | < 20 | Small | Medium | Large |
| | Yes | Yes | Yes | Yes |

**What is the CO2 equivalent change in greenhouse gas emissions?**

<table>
<thead>
<tr>
<th>Traded:</th>
<th>Non-traded:</th>
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</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
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</tbody>
</table>

_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: Matt Hancock  
Date: 17.12.2014
**Summary: Analysis & Evidence**

**Policy Option 2**

*Description: Amend the ownership unbundling provisions of the Electricity Act 1989 and Gas Act 1989*

### FULL ECONOMIC ASSESSMENT

<table>
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<tr>
<th>Price Base Year: 2014</th>
<th>PV Base Year: 2014</th>
<th>Time Period Years: 11</th>
<th>Net Benefit (Present Value (PV)) (£m)</th>
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<td></td>
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#### COSTS (£m)

<table>
<thead>
<tr>
<th></th>
<th>Total Transition (Constant Price)</th>
<th>Average Annual (excl. Transition) (Constant Price)</th>
<th>Total Cost (Present Value)</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
<tr>
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<tr>
<td>Best Estimate</td>
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</tbody>
</table>

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

Under the central case, there are not expected to be any material costs to business or the Regulator as a result of the proposal.

However, due to uncertainty around the number of applications received by Ofgem from businesses each year and consequently the potential for increased costs to business as a whole and to the Regulator, sensitivity analysis has been undertaken on these variables to provide estimates of a reasonable ‘high-case’ scenario.

Under this scenario, the total additional cost of the proposal is £7.6 million (NPV, 2014 prices) over the appraisal period, comprised of £6.2 million costs to business and £1.4 million costs to the Regulator (NPV 2014 prices).

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

There are not expected to be any material costs to business or the Regulator as a result of the proposal.

The main affected groups are:

- Ofgem as energy market regulator.
- TSOs (Transmission System Operators) consisting of: onshore gas and electricity networks, offshore electricity transmission lines (connecting offshore wind farms to the onshore network) and gas and electricity inter-connector assets connecting GB with neighbouring markets.

There are not expected to be any material costs to business from the proposal under the central case. Similarly, Ofgem do not expect to incur significant costs from additional workload related to processing applications. In addition, Ofgem would expect to be able to save resources in processing applications that would be more straightforward under the proposed amendments to the legislation. While it is not possible to quantify the magnitude of potential cost increases or reductions with accuracy, these are not expected to be material and therefore are assumed to offset each other in the central case resulting in the amendments being cost neutral to the Regulator. As such, any changes to costs will be absorbed by Ofgem within current administrative budgets and Ofgem currently has no plans to charge applicants or certified parties increased license fees and/or tender fees specifically for dealing with certification assessments.

### BENEFITS (£m)

<table>
<thead>
<tr>
<th></th>
<th>Total Transition (Constant Price)</th>
<th>Average Annual (excl. Transition) (Constant Price)</th>
<th>Total Benefit (Present Value)</th>
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<tbody>
<tr>
<td>Low</td>
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<td>n/a</td>
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<tr>
<td>High</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Best Estimate</td>
<td>n/a</td>
<td></td>
<td>Nil</td>
</tr>
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**Description and scale of key monetised benefits by ‘main affected groups’**

No benefits have been monetised, see below for non-monetised benefits.

Indicative estimates are provided on the potential benefits from reductions in the cost of investments, but these have not been included in the NPV analysis above.
Other key non-monetised benefits by ‘main affected groups’

The main affected groups are:

- Ofgem as energy market regulator.
- TSOs (Transmission System Operators) consisting of: onshore gas and electricity networks, offshore electricity transmission lines (connecting offshore wind farms to the onshore network) and gas and electricity inter-connector assets connecting GB with neighbouring markets.
- Financial Investors in transmission assets

The benefits of the policy arise from:

- Opportunities for a wider group of investors to invest in transmission assets whilst taking stakes in other energy infrastructure. These assets provide stable returns that are attractive to some classes of investor. Investors can therefore diversify their energy portfolios.
- Increased competition for investment in transmission and generation assets which may reduce the cost of the required investment in the energy sector to the benefit of consumers.

Key assumptions/sensitivities/risks

Discount rate: 3.5%

- It has not been possible to quantify any potential benefits of the measure.
- Benefits: The measure is considered pro-investment in nature as it will remove a barrier to investment caused by the current legislation. It is therefore assumed that there will be direct benefits to business from supporting investment at potentially lower cost, with indirect benefits for consumers via lower energy bills.
- Costs: There are not expected to be any material costs to business from the proposal in the central case. Similarly, Ofgem do not expect to incur significant costs from additional workload related to processing applications. Any changes to administrative burdens for Ofgem are expected to be broadly cost-neutral with upward impacts (expected to be minimal) met within current administrative budgets and have no Ofgem have no plans to charge applicants for the certification process.
- Sensitivity analysis has been undertaken to estimate potential costs to business and the Regulator under a high cost scenario. The appraisal period for the analysis is 11 years (2014-2024), with a NPV base year of 2014 and all estimates presented in 2014 real prices.
- Government is confident that the proposed amendments will remove an unnecessary barrier to investment whilst retaining the power to ensure the objectives related to the risk of discrimination of the unbundling requirements remain met. The measure will be reviewed in 2016.

BUSINESS ASSESSMENT (Option 2)

<table>
<thead>
<tr>
<th>Direct impact on business (Equivalent Annual) £m:</th>
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<th>Measure qualifies as</th>
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</thead>
<tbody>
<tr>
<td>Costs: zero</td>
<td>Benefits: zero</td>
<td>Net: zero</td>
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Evidence Base

1. Background

Overview

1. The Government wrote to Ofgem on 17 July 2014\(^1\) regarding its intentions to consult on amending the current Great Britain (GB) ownership unbundling provisions for transmission networks. Transmission networks are the high-voltage (electricity) and high-pressure (gas) networks that transport energy over large distances.

2. Articles 9 of the Electricity and Gas Directives 2009 of the EU Third Energy Package\(^2\), provided the legal framework for the structural separation (“unbundling”) between transmission system operator (TSO) activities and generation and supply activities. The aim of the Directives on unbundling of networks is to avoid conflicts of interest and to make sure that TSOs take their decisions independently, ensuring transparency and non-discrimination towards all network users. This is important to ensure both the on-going operational decisions of TSOs and their long-term strategic investment decisions reflect fair treatment of all network users. The Directives require the National Regulatory Authority in each Member State to certify transmission undertakings as compliant with the ownership unbundling requirements (see Annex B for further detail). These include on-shore transmission licensees\(^3\), interconnector licensees and offshore transmission licensees.

3. The Electricity and Gas (Internal Markets) Regulations 2011 amended the Electricity Act 1989 and Gas Act 1986 in order to transpose the requirements of the EU Third Package into GB law. There was a separate transposition for Northern Ireland where operators of infrastructure, including the Moyle (electricity) and SNIP (gas) interconnectors are certified against the requirements of the Third Package by Northern Ireland authorities.

4. The UK Government has now observed the implementation and enforcement of the Electricity and Gas (Internal Market) Regulations 2011 for some time and has learned from the practical experience both in the UK and other European countries. In addition, the Government has engaged with a number of industry stakeholders and Ofgem and is of the view that there is a risk that the existing GB ownership unbundling provisions will constrain investment in the UK.

5. In addition, the European Commission has now published a working paper\(^4\) in which they have set out their approach to certification cases to date. The working paper relates to the Commission’s secondary scrutiny of National Regulatory Authorities’ initial certification decisions. It explains that the Commission’s approach, as implemented on a case by case basis has meant that even in cases where the strict unbundling requirement of Article 9(1) of Directives 2009/72/EC and 2009/73/EC are not met, certification will not be refused if the situation does not give rise to any potential conflict of interest or incentive to exploit it.

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2. The term “Third Package” refers to a package of EU legislation on European electricity and gas markets. It entered into force on 3 September 2009. The purpose of the Third Package is to help the EU achieve more secure, competitive and sustainable energy. DECC was primarily responsible for its transposition in Great Britain and had to do this by 3 March 2011. The Gas and Electricity Markets Authority has been designated as the National Regulatory Authority of Great Britain. One of its roles is to certify Great Britain’s transmission system operators.

3. National Grid, SPT and SHETL.

6. At present there is inconsistent application of the unbundling provisions between Member States and evidence to suggest that cases which have been certified in other Member States may not be certifiable on the same facts in GB. This is the case with expected investments by a number of investors who highlighted as an example, the potential discrepancies in the treatment of their assets by the GB Regulator and those in other Member States.

7. This Government’s intention is to ensure that the energy market delivers the investment required to meet its energy and climate change objectives, supports economic growth and has the confidence of market participants. Given the concerns raised by the Regulator, industry participants and investors, it was therefore considered appropriate to consult via a ‘Call for Comments’ on amending the current GB ownership unbundling provisions in order to remove a potential disproportionate barrier to investment in the energy market. By amending the legislation, the Government intends to introduce further flexibility to Ofgem’s consideration of certification cases that do not present any “risk of discrimination”.

8. There were 6 responses to the call for comments and they were broadly positive about DECC’s proposal to give Ofgem more discretion when it is considering certification cases that do not present any risk of discrimination. Stakeholders highlighted the fact that the legislative changes will no longer constrain their future investments in transmission and generation assets. They explained how they would not have been able to pursue all of their investment plans in the UK if the law was not to change. Stakeholders also commented on the approach that Ofgem should take in developing the guidance to accompany the new regulations.

**EU Third Package – ownership unbundling requirements**

9. Energy networks are natural monopolies. Due to the high fixed investment costs it would not be efficient for there to be multiple parallel networks. The networks are therefore subject to regulation in relation to such matters as reliability, investment, use of system charges and capacity allocation. Transmission networks are also key enablers of competition and market access. Efficient investment in network assets and efficient use of available capacity has a role in keeping prices as low as is possible. Due to the pivotal role that transmission networks play in cross-border trading and flows between Member States the EU introduced rules in 2009 relating the ownership and control of these assets.

10. Article 9 of the Electricity and Gas Directives 2009 of the EU Third Energy Package provided the legal framework for the structural separation “unbundling” between Transmission System Operator (TSO) activities on the one hand, and generation, production and supply activities on the other hand. This is the highest level of separation and goes beyond the legal separation requirements required by the EU Second Package which is still in force for distribution networks. The Directives did however include some exceptions for TSOs that existed prior to agreement of the Third Package (see Annex A for further detail).

11. As detailed in the Directives and in the European Commission's subsequent interpretive note, the aim of the provisions on unbundling of networks is to avoid conflicts of interest and to make sure that TSOs take their decisions independently, ensuring transparency and non-discrimination towards all network users. This is important to ensure both the on-going operational decisions of TSOs and long-term strategic investment decisions reflect fair treatment of all users.

12. In both Directives, paragraphs 1-3 of Articles 9 detailed the requirements of ownership unbundling for transmission systems. They specified that, from March 2012 the undertaking that owns the transmission systems should also act as the operator of the transmission system (the TSO). They

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also stated that, given these transmission undertakings have ‘control’ of the transmission system, they should be prevented from ‘exercising any rights’ over energy supply, electricity generation or gas production. The reverse is also true, in that any person that has ‘control’ over energy supply, electricity generation or gas production will not be able to ‘exercise any rights’ over a transmission system.

13. In summary, the Third Energy Package (recitals 9, 11 and 15) states that:

‘Without effective separation of networks from activities of electricity generation and supply and gas production and supply (effective unbundling), there is an inherent risk of discrimination not only in the operation of the network but also in the incentives for vertically integrated undertakings to invest adequately in their networks

Only the removal of the incentive for vertically integrated undertakings to discriminate against competitors as regards network access and investment can ensure effective unbundling. Ownership unbundling is clearly an effective and stable way to solve the inherent conflict of interests and to ensure security of supply

Under ownership unbundling, Member States should therefore be required to ensure that the same person or persons are not entitled to exercise control over a generation or supply undertaking and, at the same time, exercise control or any right over a transmission system operator or transmission system (and vice versa)’

14. More details of the EU Third Energy Package unbundling requirements can be found in Annex A.

**GB transposition of unbundling requirements in 2011**

15. The current GB approach to transposition in 2011 was to introduce a regime that meets the requirements of the Directives with limited exemptions for small-scale and remote interests. Overall, the approach taken is:

- Interests outside the EEA are discounted. As a consequence, for example, Ofgem were able to certify National Grid despite their ownership of a generation assets in USA. The Commission agreed that National Grid should be certified; and

- That undertakings would fall under the ‘relevant producer or supplier’ definition, if they either require a licence in GB or would require a licence if carrying out the activity in GB. Interests that would not require a licence (due to their small size or the operation of a relevant exemption) could still be relevant when assessing compliance with ownership unbundling if they have a relationship with the applicant/certified person which the Authority thinks might lead to discrimination.

16. There are also a number of provisions that relate to TSOs that existed prior to agreement of the Third package, for example provisions for the Scottish TSOs, a provision to ensure the two gas inter-connectors received similar treatment to each other, and provision to allow lenders (who may have financial interests in a number of energy projects) to assume control in the event of a default. Details of the GB transposition are set out in Annex B.

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6 The definition of control is taken from the Council Regulations (EC) No 139/2004 of 20 January 2004 on the control of the concentrations between undertakings (‘the EC Merger Regulation).
Overview of GB transmission systems

Electricity

17. Electricity transmission assets in GB include the main on-shore networks owned by National Grid and the Scottish transmission companies and other transmission assets linking offshore wind farms to the main network and inter-connectors linking GB to the transmission systems of other countries. National Grid is the single system operator for the whole of GB.

18. For offshore transmission, the Government and Ofgem have put in place a competitive regime to appoint offshore transmission owners to own (and potentially construct) the links. For interconnection, we also have a developer led approach. These projects are most likely to succeed where they can access a wide pool of finance including from pension funds as well as businesses already active in the energy sector.

Gas

19. National Grid is the owner (TSO) of the gas transmission system across the whole of GB and as with electricity, also acts as the transmission system operator. GB has a number of transmission interconnectors linking the GB gas grid to other Member States (interconnection). There are no active projects at present to develop more interconnection, but it is possible that there could be a need for further investment in the future. Upstream connections of gas fields are not considered to be transmission systems.

2. Problem under consideration

20. As outlined above, the objective of the unbundling provisions in the Electricity and Gas Directives as transposed in GB in 2011 is the removal of any conflict of interest between TSOs, generators and suppliers. It would not be in line with this objective if certification of a TSO were to be refused for applications where it can clearly be demonstrated that there is no incentive for a shareholder in a TSO to influence the TSO’s decision making in order to favour generation or supply assets also owned by that shareholder to the detriment of network users.

21. The Government is concerned that the current ownership unbundling requirements might be unduly constraining investment. This is because the strict transposition of the unbundling requirements, notwithstanding the limited exceptions in the current GB transposition, means that Ofgem are unable to certify cases that, in the Authority’s opinion, do not present any risk of discriminatory treatment of other generators or suppliers.

22. In addition to concerns raised by Ofgem, the view that the current unbundling requirements as implemented in GB represent an unnecessary barrier to investment in some instances has also been raised by a number of investors. These organisations have highlighted their inability to proceed with investment decisions in GB under current legislation, despite being able to invest in similar circumstances in other Member States.

23. Investors have raised concerns that the view of “control and decisive influence” in the unbundling provisions may be too wide and unnecessarily cover all but the most passive form of investments. As illustrated in Figure 1 below, it is this definition of control that underpins the five core ownership unbundling tests set out in the existing legislation against which Ofgem determines whether applicants are compliant with the requirements of the Directives. In their view, this disadvantages minority shareholders who, whilst directly investing in assets, have no overall operational control or
material influence over them. Institutional investors whose intention is to invest in generation or transmission assets purely for financial returns are particularly affected by these restrictions as they typically take minority stakes in companies. The Government based on evidence gathered from industry and Ofgem are also concerned about the breadth of the definition and consequently the likelihood that the application of the five tests will act as an unnecessary barrier to investment going forward.

Figure 1: Definition of “Control” and the 5 Ownership Unbundling Tests

Control or not per S100(1), the Electricity Act 1989:
Based on the definition stated in Article 3(2) of the European Commission Merger regulation, ‘control’ means the possibility of effectively exercising decisive influence on an undertaking, on the basis of rights, contracts or any other means, either separately or in combination.

24. Whilst it is possible under the EU rules for investors to become “sleeping partners” the commercial reality is that most, if not all, investors would expect to be able to exercise some rights in the projects they invest in. Exactly what rights a particular investor wishes to hold and/or exercise will depend on the nature of their interests.

25. As outlined above, the Commission has now published a working document\(^7\) in which they have set out their approach to certification cases to date. The working paper relates to the Commission’s secondary scrutiny of National Regulatory Authorities’ initial certification decisions. The working document explains that the Commission’s approach, as implemented on a case by case basis has meant that even in cases where the strict unbundling requirement of article 9(1) of Directives 2009/72/EC and 2009/73/EC are not met, certification should not be refused if the situation does not give rise to any potential conflict of interest or incentive to exploit it.

\(^7\) http://ec.europa.eu/energy/gas_electricity/internal_market_en.htm
26. For example, the Commission found that in the certification procedures for TSOs referred to in Article 9 of the Directives, it was evident from the facts of certain cases that the simultaneous participation in transmission activities and in generation or supply activities did not give rise to any potential conflict of interest or incentive to exploit it and consequently did not pose any risk of negatively impacting on the independent management of the TSO. If certification had been refused in such cases, it would clearly have been disproportionate with regard to the objective of avoiding potential conflicts of interest or risk of discriminatory treatment.

27. Others situations have arisen in practice where interests were held by financial investors. For such investors, ownership unbundled TSOs form an important class of investment opportunities given that the regulated nature of transmission infrastructure and network tariffs offer stable, low risk returns that align well with their investment strategies. Financial investors may enable ownership unbundled TSOs to raise the necessary finance for capital expenditure required in GB and have the potential to reduce the cost of capital of those investments.

28. Moreover, our understanding is that there is inconsistent application of the rules between Member States and that some cases that have been certified in other Member States may not be certifiable on the same facts in GB. For example the German regulator has certified an applicant with generation interests in another Member State and the Commission has agreed with this certification. Under current GB rules the applicant may not be certifiable in GB.

29. The inconsistent application of the unbundling rules has also been raised with us by existing and potential investors who have highlighted their inability to proceed with investment decisions in GB under the current legislation, despite being able to invest in similar circumstances in other Member States.

30. In summary, the strict transposition of the ownership unbundling requirements in GB presents a potential significant barrier to investment. This is because Ofgem do not have discretion to certify TSOs even where the circumstances of the case demonstrably result in no risk of discrimination in the operation of the network and in the investment decisions concerning the networks. As a result, it is considered that decisions to reject such applications are not justified by the objective that the unbundling provisions seek to pursue.

3. Rationale for Government intervention

31. The Government intends to amend the Electricity Act 1989 and the Gas Act 1986 in order to enable Ofgem to have greater flexibility in its consideration of certification cases under the EU unbundling requirements as transposed into GB law. The ability to certify a wider group of cases, that do not present any risk discriminatory treatment, will meet Ministerial concerns that the unbundling requirements may create an unnecessary barrier to investment and are not consistent with certification decisions in some other Member States.

32. Ofgem and DECC investigated extensively whether it would be possible to take a more flexible approach within the existing legislation, given that the aim was to resolve the issue without legislative changes if possible. However, such an approach was not considered to be legally robust.

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4. Policy objectives

33. The Government intends to amend the current legislation in order to meet the following policy objectives:

- retain ownership unbundling rules but allow for a more flexible approach to be taken by Ofgem in considering certification cases whilst retaining the overall aims of the EU Directives on ownership unbundling requirements;

- retain the risk of discrimination\(^9\) as a hurdle to the common control of networks and interests in power generation, gas production and electricity and gas supply;

- avoid perverse or disproportionate outcomes;

- support investment and provides investors with greater clarity on certification;

- does not create uncertainty for those already certified or any need to revisit those cases (assuming no change in circumstances).

5. Description of options considered

34. Two main policy options have been considered:

- **Option 1**: The baseline, ‘do nothing’ option;

- **Option 2**: Amend the regulations on ownership unbundling in GB.

**Option 1 – Do nothing (base case option in which the existing regulations on ownership unbundling are retained)**

35. This option reflects the baseline, business as usual case where the existing ownership unbundling regulations which determine the certification criteria for transmission system owners under the Electricity Act 1989 and Gas Act 1989 would continue unchanged.

36. This option would not address concerns about the unnecessary barrier to investment that has been created in some instances by the unbundling provisions in GB and therefore does not meet the stated policy objective.

**Option 2 – Amend the regulations on ownership unbundling in GB to enable the Regulator to apply discretion on the risk of discriminatory behaviour as part of the certification process.**

37. This option would introduce flexibility into the decision making criteria applied by Ofgem when determining certification of transmission system applications. In particular, it would allow Ofgem to apply discretion to the assessment of whether ownership of transmission assets would present a risk of discriminatory treatment. In doing so it would support the need for investment in the energy sector whilst preserving the overall aims of the EU Directives on ownership unbundling requirements.

38. The proposal would retain the five core ownership unbundling tests (see Figure 1 above and Annexes A and B) set out in the existing legislation against which Ofgem determines whether

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\(^9\) Where a transmission company also holds production/generation/supply interests, the transmission company may have an incentive to treat that production/generation/supply company more favourably than others (in a ‘discriminatory’ manner) – the unbundling rules are intended to prevent this happening (in order to promote competition), but in practice there are situations where there is no likelihood of such discriminatory behaviour occurring
applicants are compliant with the requirements of the Directives. However, subject to the Authority’s statutory duties, where any of the five tests are not met, the applicant would have to demonstrate to Ofgem’s satisfaction that there is no risk of discrimination arising from the ownership arrangements. If satisfied, Ofgem will have the power to decide that the applicant should be certified as meeting the ownership unbundling requirements and able to operate as a TSO.

39. This would mean, for example, that Ofgem could certify businesses where generation interests are geographically remote from the transmission assets or where an investor (e.g. pension fund) has a diverse portfolio with no incentive or ability to discriminate. Ofgem will decide on a case by case basis whether any interest should be considered relevant to the ownership unbundling test.

40. The new regulations will explicitly prohibit Ofgem from exercising its discretion to certify where one or more of the five ownership unbundling tests set out in GB legislation are not met where the applicant has controlling/exercising rights in generation assets which are connected directly to a transmission system in which they also have an interest as this is likely to result in clear risk of discriminatory behaviour.

Alternatives to Legislation

41. As outlined in above, Ofgem and DECC considered whether it would be possible to take a more flexible approach within the existing legislation. However, this solution was not considered to be legally robust.

6. Monetised and non-monetised costs

42. This section identifies and analyses the potential costs and benefits of the proposed amendments to the GB unbundling regulations. It has not been possible to quantify the potential benefits that are expected to result from the policy proposal as explained further below. Under the central case there are not expected to be any additional costs to business or the Regulator as a result of the proposal. Any potential administrative cost increases for Ofgem in the initial years of the revised legislation would be absorbed within current budgets. Under the central case the changes will not result in any increase in license fees as a result of the small number of applications, if any, requiring additional scrutiny by the Regulator each year and therefore there will be no additional costs to business relative to the baseline. Ofgem also has no plans to charge fees for the certification process.

43. However, due to the uncertainty around the number and complexity of applications received by Ofgem each year and consequently the potential for the organisation to incur increased administrative costs, sensitivity analysis has been undertaken on these variables as presented in the ‘high-cost’ scenario below.

Option 1: Do nothing (base case option in which the existing regulations on ownership unbundling are retained)

44. By definition, under the baseline ‘do nothing’ option, there would be no change to the current regulations on ownership unbundling in GB and consequently there are no costs or benefits associated with maintaining the status quo.

45. The transposition of the unbundling provisions in UK law would remain as currently set out in the Electricity Act 1989 and Gas Act 1989 and there may continue to be investment constraints for certain investors regarding energy transmission, generation and supply businesses.

46. The National Infrastructure Plan 2013\(^\text{10}\) put the pipeline of investment in the energy sector at over £200 billion. The Government’s Electricity Market Reform (EMR) programme provides a package of

\(^{10}\) HM Treasury and Infrastructure UK, National Infrastructure Plan, March 2013
measures to incentivise the investment needed to replace the UK’s ageing electricity infrastructure with a more diverse and low-carbon energy mix. The EMR Delivery Plan of December 2013 estimated that around £110 billion (real 2012 prices) of investment in electricity generation and networks was needed between 2013 and 2020. As illustrated in Figure 2 below, in 2013, £14 billion was invested against the £110 billion estimate, with DECC’s latest estimates suggesting that up to £100 billion of further investment could still be needed from 2014 to 2020 (real 2012 prices). Of that, it is estimated that £35 billion is needed in networks (transmission and distribution) and between £55-65 billion is needed in generation assets. These expenditure estimates are consistent with delivering the volume of new installed generating capacity (GW) as set out in the EMR Delivery Plan.

47. For gas transmission networks, the level of allowable expenditure agreed between the TSO and Ofgem over the price control period (1 April 2013 to 31 March 2021) is £1.2 billion (real 2012 prices). While there are no further planned investments at this time, it is possible that further expenditure will be required in the next price control period.

**Figure 2: Estimated investment needed in electricity between 2014 and 2020.**

48. Under the baseline case, it is assumed that the required investment by 2020 in both generation and transmission assets is achieved as a result of the package of EMR measures and the current regulatory arrangements underpinning investments in networks.

**Option 2: Amend the regulations on ownership unbundling in GB to enable the Regulator to apply discretion on the risk of discriminatory behaviour as part of the certification process.**

**Benefits**

49. As set out above, it is assumed that the required investment of up to £100 billion in electricity infrastructure and £1.2 billion (real 2012 prices) in gas transmission infrastructure through to end 2020 will be achieved with the current set of policy measures and regulatory arrangements. As a result, the policy proposal is not assumed to increase the gross level of expenditure over the period to 2020 or more specifically the level of new generating or transmission capacity that is commissioned. While it has not been possible to quantify the potential benefits that are expected to result from the policy proposal with accuracy in order to present them in Net Present Value terms in the summary sheets of this Impact Assessment, indicative analysis on potential cost savings related to investments in generation and offshore transmission assets are set out below. This demonstrates that relatively small improvements in the level of competition for investments in energy infrastructure

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would be required to significantly outweigh any increases in administrative costs for business or the Regulator. Therefore, overall the proposal is expected to have a positive effect on business and society (net economic benefit in NPV terms).

**Increased competition and expanded investor pool**

50. A key benefit of the increased flexibility in Ofgem applying the unbundling rules will be to remove a potential barrier to investment in electricity and gas generation, production, supply and transmission assets. In doing so, it could be expected to widen the pool of potential investors in UK energy infrastructure, which in turn would increase competition for investment in these assets.

51. By removing a potential barrier to investment and encouraging new classes of investors, it is possible that the amended regulations could increase the participation of institutional investors in UK energy markets and raise the future levels of realised investment and/or reduced the overall investment costs. All six responses to the ‘Call for Comments’ supported this view.

52. Greater involvement of institutional investors in the GB energy sector may be beneficial regarding strengthening governance and removing conflicts of interest. Many institutional investors are known for challenging company management teams and improving governance controls and structures, offering risk mitigation which may align with the underlying intention of the unbundling provisions to prevent conflicts of interest and discriminatory behaviour. This is a potential benefit to businesses and wider society.

**Reduction in capital, operational and financing costs**

53. A wider pool of investors, new market entry and consequently increased competition for investment in energy infrastructure could be expected to have a direct impact in driving cost reductions in the construction and operation of generation and transmission assets. As a result the overall capital expenditure required to deliver the necessary new capacity through to 2020 could be less than the current estimate of up £100 billion 9real 2012 prices). In addition, the proposed amendments to the regulations could also lead to reductions in the financing costs (weighted average cost of capital - WACC) of these investments.

54. In electricity transmission, due to the framework of competitive tendering models which are administered by Ofgem for investments in offshore networks, increased competition could be expected for investments in these assets. The overall capital expenditure required to deliver the estimated new offshore transmission networks capacity needed through to 2020 could therefore be less than the current estimate of around £3.2 billion (out of the estimated total of £35 billion by 2020 for all networks i.e. transmission and distribution). In addition, greater flexibility for Ofgem in the TSO certification process removes a potential risk associated with investment decisions regarding UK generation and transmission assets, and could therefore lower investors’ cost of capital for these investments. While it is not possible to quantify with accuracy the potential capital cost or financing cost reductions that could accrue as a result in delivering the same level of new electricity transmission capacity, Box 1 below presents indicative analysis to demonstrate the potential magnitude of savings under a reasonable set of assumptions. Due to the uncertainty around how investments will be made in practice these indicative estimates are not included in the headline Net Present Value estimates as reported in the summary sheets of this Impact Assessment.
Box 1: Indicative analysis on potential savings on offshore transmission networks investments

Increased competition for investment in offshore transmission networks could reduce the total required capital expenditure which is estimated at £3.2 billion (real 2012 prices) over the period 2014-20 and also has the potential to reduce the financing costs associated with these investments. While the eventual impacts are uncertain, indicative estimates of the costs savings for each are presented below to demonstrate the potential magnitude of impacts.

**Capital costs reductions**

The table below compares two indicative scenarios of capital costs reductions of 1% and 10% relative to the baseline projection of £3.2 billion (real 2012 prices) over the period 2014-20. Based on the projected profile of expenditure over the period, in NPV terms (discounted at 3.5%), the potential savings in capital costs are £29 million and £285 million respectively (2012 prices).

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Absolute Cumulative Capital Cost projection 2014-2020 (real 2012 prices), £m</th>
<th>NPV of cumulative capital cost projection 2014-2020 (real 2012 prices), £m</th>
<th>NPV difference of cost reduction scenario relative to baseline (benefit), £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline projection</td>
<td>£3,219</td>
<td>£2,851</td>
<td>n/a</td>
</tr>
<tr>
<td>1% reduction in capital costs</td>
<td>£3,187</td>
<td>£2,823</td>
<td>£29</td>
</tr>
<tr>
<td>10% reduction in capital costs</td>
<td>£2,897</td>
<td>£2,566</td>
<td>£285</td>
</tr>
</tbody>
</table>

**Financing costs reductions**

The table below compares two indicative scenarios of financing cost (weighted average cost of capital – WACC) reductions of 1.0 basis point and 10 basis points for the projected £3.2 billion of expenditure over the period 2014-20, relative to an assumed baseline cost of capital of 10% for all investment projects (total expenditure). This is a simplifying assumption to demonstrate the potential magnitude of cost savings as in practice individual developers and projects will have different financing costs. Similarly, for illustrative purposes it is assumed that financing costs are repaid over a 15 year period for all investments and hence the last year of repayments is 2034 for capital expenditure incurred in 2020. As reported in the table below, a 1 basis point reduction results in savings in NPV terms (discounted at 3.5%) of £0.67 million and £2.38 million over the periods to end 2020 and end 2034 respectively. A 10 basis point reduction results in estimated savings of £6.6 million and £23.8 million respectively (real 2012 prices).

<table>
<thead>
<tr>
<th>Scenario</th>
<th>NPV of financing costs 2014-20 (benefit), £m</th>
<th>NPV difference of financing cost reduction scenario relative to baseline, 2014-20 (benefit), £m</th>
<th>NPV of financing costs 2014-34 (benefit), £m</th>
<th>NPV difference of financing cost reduction scenario relative to baseline, 2014-34 (benefit), £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline financing costs (10% WACC)</td>
<td>£1,166</td>
<td>n/a</td>
<td>£4,172</td>
<td>n/a</td>
</tr>
<tr>
<td>1.0 bps reduction (9.99% WACC)</td>
<td>£1,165</td>
<td>£0.67</td>
<td>£4,169</td>
<td>£2.38</td>
</tr>
<tr>
<td>10 bps reduction (9.90% WACC)</td>
<td>£1,159</td>
<td>£6.6</td>
<td>£1,166</td>
<td>£23.8</td>
</tr>
</tbody>
</table>
55. In generation assets, the vast majority of the estimated £55-65 billion of investment over the period to end 2020 will be supported by two new EMR mechanisms: the Contract for Difference (CfD) and the Capacity Market.

- Contracts for Difference are designed to provide long-term price stabilisation to low carbon plant, allowing investment to come forward at a lower cost of capital and therefore at a lower cost to the consumer.

- The Capacity Market provides a regular retainer payment to reliable forms of capacity (both demand and supply side), in return for such capacity being available when the system is tight. This will provide an insurance policy against future blackouts – for example during cold, windless periods – helping to ensure consumers continue to receive reliable electricity supplies at an affordable cost.

56. In developing these mechanisms, affordability for consumers has been a key consideration. Both mechanisms work with the market and encourage competition, in order to minimise costs, while also delivering the required investment. Allocation of CfDs to low-carbon plant and reliable generating capacity procured through the Capacity Market will both be run through competitive auctions, where applicants compete on the basis of the price they bid. Consequently, any increase in competitive tension in these auctions as a result of a wider pool of investors would to some extent be expected to reduce the overall estimated investment costs of £55-65 billion needed to deliver the required level of new low-carbon and reliable capacity over the period to 2020 or reduce the associated financing cost of the investments. As with the potential savings on transmission investment costs, it is not possible to quantify with accuracy the potential capital cost or financing cost reductions that could accrue as a result of delivering the same level of new electricity generating capacity. However, Box 2 below presents indicative analysis to demonstrate the potential magnitude of savings under a reasonable set of assumptions. Due to the uncertainty around how investments will be made in practice these indicative estimates are not included in the headline Net Present Value estimates as reported in the summary sheets of this Impact Assessment.
Box 2: Indicative analysis on potential savings on investments in generation assets

Increased competition for investment in generation assets could reduce the total required capital expenditure which is estimated at between £55-65 billion (real 2012 prices) over the period 2014-20 and also has the potential to reduce the financing costs associated with these investments. As with the analysis on offshore transmission assets, while the eventual impacts are uncertain, indicative estimates of the costs savings for each are presented below to demonstrate the potential magnitude of impacts.

Capital costs reductions

The table below compares two indicative scenarios of capital costs reductions of 1% and 10% relative to a central baseline projection of around £60 billion (real 2012 prices) over the period 2014-20. Based on the projected profile of expenditure over the period, in NPV terms (discounted at 3.5%), the potential savings in capital costs are £543 million and £5,433 million respectively (real 2012 prices).

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Absolute Cumulative Capital Cost projection 2014-2020 (real 2012 prices), £m</th>
<th>NPV of cumulative capital cost projection 2014-2020 (real 2012 prices), £m</th>
<th>NPV difference of cost reduction scenario relative to baseline (benefit), £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline projection</td>
<td>£60,388</td>
<td>£54,329</td>
<td>n/a</td>
</tr>
<tr>
<td>1% reduction in capital costs</td>
<td>£59,784</td>
<td>£53,785</td>
<td>£543</td>
</tr>
<tr>
<td>10% reduction in capital costs</td>
<td>£54,349</td>
<td>£488,96</td>
<td>£5,433</td>
</tr>
</tbody>
</table>

Financing costs reductions

The table below compares two indicative scenarios of financing cost (weighted average cost of capital – WACC) reductions of 1.0 basis point and 10 basis points for the projected central estimate of £60 billion of expenditure over the period 2014-20, relative to an assumed baseline cost of capital of 10% for all investment projects (total expenditure). This is a simplifying assumption to demonstrate the potential magnitude of cost savings as in practice individual developers and projects will have different financing costs. Similarly, for illustrative purposes it is assumed that financing costs are repaid over a 15 year period for all investments and hence the last year of repayments is 2034 for capital expenditure incurred in 2020. As reported in the table below, a 1 basis point reduction results in saving in NPV terms (discounted at 3.5%) of £14.2 million and £45.4 million over the periods to end 2020 and end 2034 respectively. A 10 basis point reduction results in estimated savings of £142.0 million and £453.2 million respectively (real 2012 prices).

<table>
<thead>
<tr>
<th>Scenario</th>
<th>NPV of financing costs 2014-20 (benefit), £m</th>
<th>NPV difference of financing cost reduction scenario relative to baseline, 2014-20 (benefit), £m</th>
<th>NPV of financing costs 2014-34 (benefit), £m</th>
<th>NPV difference of financing cost reduction scenario relative to baseline 2014-34 (benefit), £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline financing costs (10% WACC)</td>
<td>£24,912</td>
<td>n/a</td>
<td>£79,484</td>
<td>n/a</td>
</tr>
<tr>
<td>1.0 bps reduction (9.99% WACC)</td>
<td>£24,898</td>
<td>£14.2</td>
<td>£79,439</td>
<td>£45.4</td>
</tr>
<tr>
<td>10 bps reduction (9.90% WACC)</td>
<td>£24,770</td>
<td>£142.0</td>
<td>£79,031</td>
<td>£453.2</td>
</tr>
</tbody>
</table>
Reduction in consumer bills

57. A reduction in investment costs - whilst delivering the same level of generating and transmission capacity as projected in the EMR Delivery Plan (the baseline projection) - would have an indirect benefit to consumers via a reduction in the costs passed through to household and non-domestic energy bills.

58. This is because the support costs associated with CfDs and the Capacity Market will be met by consumers via levies on electricity suppliers. Similarly, any reduction in the overall costs of investment or operation of transmission networks will have a beneficial effect as a result of a smaller level of capital expenditure being recovered via consumer bills. For onshore electricity networks, the allowable revenue which can be recovered via consumer bills is approved by Ofgem as part of the RIIO (Revenue=Incentives+Innovation+Outputs) price control framework and reflects the level of allowable capital expenditure for each TSO as over the price control period. Offshore electricity transmission networks are the responsibility of Offshore Transmission Owners (OFTO) with charges for usage of the networks levied on offshore generators. These charges will be reflected in the price at which offshore generators bid into CfD auctions, and will therefore be passed on to consumers via the CfD supplier obligation levy. Any reduction in the cost of constructing and operating offshore electricity networks will therefore also have a beneficial effect on consumer bills.

59. Due to uncertainty around the extent to which the proposed change to the unbundling regulations would increase competition in the energy markets, it has not been possible to quantify the potential future reductions in investment costs or consumer bills. In theory, the change should however be expected to have a beneficial effect on costs with knock-on positive impacts for energy consumers.

Risk mitigation and security of supply

60. While it is expected that the estimated required investment in generating and transmission capacity will come forward in the timetable envisaged as a result of the current regulatory and support measures, there remain risks around the delivery of these investments. The proposed amendments should therefore help mitigate this risk to the extent that they expand the pool of investors and reduce the costs of bringing forward the required capacity. In addition, to the extent that the amendments reduce the risk premia attached to investments, financing costs could also fall on average. Such positive effects on the conditions for investment would also be expected to improve the security of supply outlook in both electricity and gas markets.

Costs

Costs to business

61. The proposed change in the regulations is not expected to impose additional administrative burdens on business and therefore no additional direct costs for applicants are envisaged. This is expected to be the case for both new applicants and currently certified businesses. Due to the expected minimal if any effect of the changes on future workload for Ofgem in certifying applications, the Regulator does not currently plan to make provision to increase budget for this aspect of its regulatory duties, or to begin charging applicants or certified parties for any costs incurred for dealing with certification assessments.

62. This is because the existing process for TSO certification is not expected to change. In terms of the evidence to be submitted by businesses, there will be no prescriptive change by Ofgem in terms of the nature, volume, or robustness of information to be provided when applying for certification as a TSO. In essence, the Ofgem procedures will continue to operate as they do currently in that they require businesses to demonstrate that there is no “risk of discrimination” regarding generation, production, supply and transmission asset ownership when applying for certification.
63. Based on experience to date of the approach businesses follow prior to engaging with Ofgem, it is expected that they would continue to ensure they have undertaken all necessary due diligence including seeking legal advice and taking into account Ofgem guidance in order that they have a robust case for certification before requesting Ofgem to exercise the new powers of discretion.

64. Ofgem is considering publishing guidance to clarify the proposed legislative changes. The guidance document would help reduce any uncertainty that a prospective applicant or currently certified party may face about the operation of the amended regulation in practice and is likely to simplify the process of submitting applications to Ofgem.

**Cost to the Regulator**

65. In the central case, the proposed change in the regulations is not expected to impose additional administrative burdens on Ofgem. This is because Ofgem do not envisage the proposal resulting in a material increase in costs from additional workload related to processing applications. While there is potential for the number of applications and consequently administrative costs per annum to increase as a result of processing applications and reviews as a result of the less restricted amended legislation, the potential level of changes are likely to be small in volume and value respectively. In addition, Ofgem expect to be able to realise significant resource savings from processing applications that would be more straightforward under the proposed amended legislation.

66. In the central case, the proposal is therefore expected to be cost-neutral to Ofgem, either as a result of there being no changes to overall costs of processing applications or because individual applications which increase costs are completely offset by cost reductions from less burdensome applications. This is considered a reasonable assumption given the small number of applications submitted to the regulator each year currently and the minimal changes envisaged as a result of amending the legislation.

67. As outlined previously, Ofgem does not currently plan to make provision to increase budget for this aspect of its regulatory duties, or to begin charging applicants or certified parties for any costs incurred for dealing with certification assessments. This is a result of any increase in cases or costs being likely to be small, although it is difficult to forecast at this stage the potential volume or values of such changes. Ofgem will therefore absorb any increase in administrative costs within existing budgets, and review this approach as deemed necessary in the future.

**Sensitivity Analysis - High Cost Scenario**

**Costs to business**

68. Due to uncertainty around the number of applications received by Ofgem from businesses each year and consequently the potential for increased costs to business as a whole, sensitivity analysis has been undertaken on these variables. Under this ‘high-cost’ scenario it is assumed that the amended legislation leads to three, more complex applications from businesses per year where these businesses request that Ofgem consider whether to exercise discretion to grant certification. Under these circumstances it is assumed that the businesses undertake significant additional due diligence prior to submitting their application to Ofgem. The additional time required to prepare the cases and engage with Ofgem would be expected to increase internal staffing costs and the costs of external legal advice. Based on experience to date with industry, it is considered that a reasonable average cost to business for each of these more complex cases is £250,000 (2014 prices) per annum. Based on three applications of this type per annum from 2015 (the year in which the amended legislation would be implemented) to 2024, the additional cost to business would be £750,000 (2014 prices) per annum. In Net Present Value terms, discounted at 3.5% over the appraisal period, the total additional cost to business in the high cost scenario would be around **£6.2 million (2014 prices)**.
69. This high cost scenario does not take into account the potential for a number of applications by businesses to be considerably more straightforward under the proposed amended legislation, as is expected to be the case. As outlined above under the central case, based on current practices the expectation is that businesses undertake the necessary due diligence prior to submitting an application to Ofgem, and the level of due diligence undertaken is commensurate with the complexity of the case and likelihood of certification. A reduction in the level of due diligence for these less complex cases would therefore realise offsetting cost savings for businesses as a whole. However, the purpose of this scenario is to present a reasonable and prudent high end estimate of costs to business and therefore potential offsetting cost reductions from more straightforward applications have not been quantified.

Costs to the Regulator

70. As outlined above, there is uncertainty around the number of applications received by Ofgem each year and consequently there is the potential for the Regulator to incur increased administrative costs. Under the high cost scenario it is assumed that following a review of the impact of the amended regulations on resources, Ofgem require additional staff to deal with the incremental workload related to processing applications and case reviews as a result of the less restricted amended legislation. As the review of the measure is planned for 2016, it is further assumed that Ofgem begin incurring increased staffing costs from 2017 onwards. In particular, it recognised that upon request by an applicant or currently certified party, Ofgem would have to consider whether to exercise discretion to grant certification. Under such circumstance it is assumed that Ofgem would have to perform additional assessments to establish whether the applicant or certified party’s relationship with a generator with installed capacity of more than 50MW (See Annex C for diagram of “Relevant producer/supplier” consideration”) may lead to the “risk of discrimination”.

71. While it is difficult to estimate the frequency and complexity of additional cases per annum, for the purposes of presenting a reasonable ‘high-case’ scenario - consistent with the high end estimates of costs to business - it is assumed that there are three additional cases each year requiring additional scrutiny compared to under the current regulations. Based on indicative estimates from Ofgem, it is further assumed that three additional employees are required at various salary grades to provide policy, managerial and legal support in order to process these applications. In total, additional staff costs including on-costs are estimated to be £219,500 per annum from 2017-2024 (2014 prices)\(^\text{13}\). In Net Present Value terms, discounted at 3.5%, the total additional cost to Ofgem is estimated to be £1.4 million (2014 prices) over the appraisal period.

Summary of Costs and Benefits

72. Table 1 below summarises the estimated impacts in Net Present Value terms on business, the Regulator and society overall from the proposed amendments to the legislation. While it has not been possible to quantify the potential benefits that are expected to result from the policy proposal, these are expected to significantly outweigh any costs that are incurred by business and result in a net societal benefits overall. In the central case there are not expected to be any additional costs to business or the Regulator. It is therefore considered reasonable to expect a net incremental benefit to business from the policy given that there are expected to be significant positive impacts on conditions for investment. As the central case assumes zero net cost, logically no sensitivity analysis on a ‘low case’ has been undertaken. The high estimate reflects what is considered to be a ‘high-cost’ scenario where the amendments to the legislation result in increased administrative burdens to both business and the Regulator.

\(^\text{13}\) The estimated staff costs are based on two additional employees being required at the median earnings for Grade 6/7 and one additional member of staff being required at SEO median earnings level. Salary estimates are uplifted by 50% for on-costs per annum. Estimates are sourced from the Office for National Statistics. [http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-319802#tab-all-tables](http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-319802#tab-all-tables)
73. The indicative analysis on potential cost savings related to investments in generation and offshore transmission assets as set out above demonstrates that relatively small improvements in the level of competition for investments in energy infrastructure would be required to significantly outweigh any increases in administrative costs for business or the Regulator. Therefore, overall the proposal is expected to have a positive effect on business and society (net economic benefits in NPV) terms.

Table 1: Summary of estimated costs from proposed amendments to the legislation, £m NPV (2014 prices, 2014-2024).

<table>
<thead>
<tr>
<th></th>
<th>Central</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost to business</td>
<td>Zero</td>
<td>£6.2</td>
</tr>
<tr>
<td>Cost to the regulator</td>
<td>Zero</td>
<td>£1.4</td>
</tr>
<tr>
<td>Total societal cost</td>
<td>Zero</td>
<td>£7.6m</td>
</tr>
</tbody>
</table>

**Wider Impacts**

**Competition**

74. It is expected that the amended GB regulations will increase competition in the financing of transmission assets and enable transmission investors to compete in other energy sectors subject to no conflicts of interest. The measure is aimed at removing a barrier to competition for investment in energy infrastructure and should therefore increase the competitiveness of the sector domestically and internationally, with associated reductions in costs and result in indirect benefits for consumers. The amendments should also benefit financial investors (e.g. individuals, organisations, and pension funds) by enabling access to investment in regulated transmission assets which align well with their existing investment portfolios.

**Small and Micro Business Assessment**

75. It is expected that the businesses (TSOs) directly affected by the proposed new regulations will be medium or large organisations. The proposal is a pro-investment measure as it is aimed at removing an unnecessary barrier to investment and places no direct administrative burden on businesses of any size. There is potential for small and micro businesses, particularly in the electricity generation sector, to benefit from the amendments as they should enable a wider class of financial investors to invest simultaneously in transmission and generation assets where there is no risk of discrimination.

**Rationale and evidence that justify the level of analysis used in the IA**

76. The proposed amendments to the unbundling provisions in the legislation are pro-investment in nature and do not present a contentious policy change. It is a low risk regulatory amendment and is likely to have a negligible (if positive) impact on costs, given the small number of stakeholders. The low sensitivity surrounding the proposed legislation change is further underlined by the fact that the proposed change was accompanied by a call for comments, rather than a full consultation.

77. The presentation of expected impacts, in particular estimated benefits, is qualitative rather than quantitative due to the uncertainty around the extent to which the policy proposal will have a positive direct impact on investment levels and associated costs. This is considered proportionate given that there are not expected to be any new additional costs to business or the Regulator under central expectations. DECC took the opportunity to consult stakeholders on any evidence that they may hold which would help in assessing the costs and benefits of all groups affected by the amended GB Law.
7. Risks and assumptions

78. The central case assumes that there are no costs associated with the proposed amendments to the regulations either to the Regulator or business. This is considered a reasonable expectation of the way in which the changes will affect behaviour in practice. The expected benefits of the change, whilst not quantified for the headline NPV estimates, are expected to significantly outweigh any costs that transpire. This is illustrated using indicative analysis on potential reductions in the cost of investments in the energy sector.

79. However, in recognition of the uncertainty around the number of applications received by Ofgem from businesses each year and consequently the potential for increased costs to business as a whole and the regulator, sensitivity analysis has been undertaken as presented in the ‘high-cost’ scenario above. As with the central case, scenario, the expected benefits of the proposal would be expected to significantly outweigh the high end estimates of costs.

8. Direct costs and benefits to business - One In Two Out (OITO)

80. The proposed amendments to the unbundling provisions in the legislation are intended to enable investment in transmission, supply and generation assets in the UK. They do not present a contentious policy change and this point has been confirmed by the stakeholder responses to the ‘Call for Comments’. The measure is a pro-investment measure as it is aimed at removing an unnecessary barrier to investment. While it has not been possible to quantify the potential benefits of the policy, it would be reasonable to expect a net incremental benefit to business given that in the central case costs are expected to be zero while there is expected to be a positive impact on conditions for investment. Therefore, it is considered that this proposal should be scored as a zero net cost measure for the purposes of OITO.

81. As discussed above, the Government is committed to investment and growth and to removing any unnecessary barrier to investment. It has observed the implementation and enforcement of the Electricity and Gas (Internal Markets) Regulations 2011 for some time and has learned from the practical experience both in the UK and other European countries. In addition, stakeholders’ feedback has been acknowledged around the need to review and amend the current GB law as they have made the case that there is a risk that the existing GB ownership unbundling requirements might constrain investment in the UK. Also, the Commission’s published working document has been taken into account which makes the case for a less strict implementation of the Third Energy Package Directives and the fact that some other Member States have already adopted less strict approaches. This is what encouraged stakeholders and in particular investors to approach DECC and Ofgem and ask for the GB law to be amended. Stakeholders have commented that these GB law amendments are very welcome and they will engage further with the Commission to try to influence other Member States to adopt a less strict approach.
9. Summary of preferred option and implementation plan

82. The preferred option is to amend the ownership unbundling provisions of the Electricity Act 1989 and Gas Act 1986 to introduce further flexibility to Ofgem’s consideration of certification cases that do not present risk of discriminatory treatment (i.e. Option 2).

83. Transmission businesses need to comply with the EU ownership unbundling rules as transposed into GB legislation and be certified by Ofgem as in compliance with these rules. However, there is concern that the current transposition of the ownership unbundling rules might be unduly constraining investment and may mean that Ofgem are unable to certify cases that, in the Authority’s opinion, do not present any risk of discriminatory treatment. There is also evidence that the GB transposition of the unbundling rules is now stricter than the position taken by the EC working paper and applied in other Member States.

84. Under the proposal Ofgem will have the power to decide that the TSO should be certified (subject to consideration of their statutory duties) where, for example, an investor (e.g. pension fund) has a diverse portfolio and can demonstrate to Ofgem’s satisfaction that with the structure has no incentive or ability to discriminate. Ofgem will decide on a case by case basis whether there is a risk of discrimination.

85. DECC aims for the amended regulations to come into effect in early 2015. This will take place as soon as they have been laid in Parliament for 21 days. The revised Regulations do not need to start on a common commencement date (CCD) as they deliver a benefit to industry and the Better Regulation Executive have agreed that we can deviate from a CCD.

86. The Regulations will be reviewed alongside the rest of the EU Third Energy Package ownership unbundling GB regulations in 2016 to ensure that they are still effective and fit for purpose. Such a review will adhere to the Better Regulation principles of proportionality.
Annex A: The Third Package unbundling requirements

1. The Third Package Directives provide for three models of unbundling:
   (1) the ownership unbundling model (Article 9(1)\textsuperscript{14} of each Directive);
   (2) the independent system operator (“ISO”) model (Article 13 Electricity Directive, Article 14 Gas Directive); and
   (3) the independent transmission operator (“ITO”) model (Articles 17-23 of each Directive).

2. The Directives also include a provision in Article 9(9) where there are arrangements in place which guarantee more effective independence of the TSO than the ITO model. The Article 9(9) model has been used by Scottish Power and SSE, which have both been certified under this provision.

3. Member States may only choose the ISO, TSO or Art 9(9) models in respect of TSOs which were vertically integrated at the point that the Directives came into force (3 September 2009). Where interests have been acquired after this point the relevant companies must therefore comply with the ownership unbundling requirements in Article 9(1).

4. The issue in question is the proper interpretation of the requirements of the ownership unbundling model contained in Article 9(1) and the extent to which these only apply where there is a conflict of interest between the transmission and generation, production or supply interests.

5. Article 9(1) provides that:

   Member States shall ensure that from 3 March 2012:

   (a) each undertaking which owns a transmission system acts as a transmission system operator;

   (b) the same person or persons are entitled neither:

   (i) directly or indirectly to exercise control over an undertaking performing any of the functions of generation or supply, and directly or indirectly to exercise control or exercise any right over a transmission system operator or over a transmission system; nor

   (ii) directly or indirectly to exercise control over a transmission system operator or over a transmission system, and directly or indirectly to exercise control or exercise any right over an undertaking performing any of the functions of generation or supply;

   (c) the same person or persons are not entitled to appoint members of the supervisory board, the administrative board or bodies legally representing the undertaking, of a transmission system operator or a transmission system, and directly or indirectly to exercise control or exercise any right over an undertaking performing any of the functions of generation or supply; and

   (d) the same person is not entitled to be a member of the supervisory board, the administrative board or bodies legally representing the undertaking, of both an undertaking performing any of the functions of generation or supply and a transmission system operator or a transmission system.

6. The Commission has indicated that it is taking an interpretation of Article 9(1) such that the Commission will approve certification of TSOs (i.e. that they have complied with the unbundling requirements) even where the circumstances in Article 9(1)(b), (c) or (d) are present if the Commission considers that there is no conflict of interest or no incentive to exploit a conflict of interest in a particular case.

\textsuperscript{14} \url{http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32009L0072&from=EN}
Annex B: The GB legislation

1. The unbundling provisions are set out in sections 10D to 10O Electricity Act 1989 and sections 8C to 8Q Gas Act 1986. The provisions are mirrored between the two Acts; for ease of reference this note refers to the Electricity Act 1989 provisions only.

2. Section 10A sets out the obligation for electricity transmission licence holders and interconnectors to be certified as independent, and s10B sets out the process for an application for certification. Section 10C applies where the applicant is connected with a country outside the EEA. Section 10D sets out the process for Ofgem (‘the Authority’) to consider whether to certify an applicant. Ofgem makes a preliminary decision which is notified to the applicant, the Secretary of State and the Commission. The Commission then has two months to issue an opinion on the certification, and Ofgem then makes a final decision which must ‘take utmost account’ of the Commission’s opinion.

Grounds for certification

3. Section 10E sets out the grounds on which an applicant may be certified; Ofgem may only certify the applicant if one of five grounds applies:

   (1) s10E(3): the applicant meets the ownership unbundling requirement in section 10F;
   (2) s10E(4): the applicant has asked to be exempt from the ownership unbundling requirement on the grounds of Article 9(9) of the Electricity Directive (alternative arrangements for independence);
   (3) s10E(5): the applicant has nominated an ISO in accordance with Article 13 of the Electricity Directive;
   (4) s10E(6): the applicant is an interconnector which has been granted an exemption under Article 17 of the Electricity Directive;
   (5) s10E(7): the applicant is an interconnector which has been granted an exemption under Regulation 1228/2003.

4. The GB legislation therefore provides for the ownership unbundling model and the ISO model, as well as the Article 9(9) model. The ITO model was transposed into the GB legislation for gas interconnectors only.

5. Regardless of whether a certification ground applies, Ofgem may decide not to certify the applicant if the certification would put at risk the security of electricity supplies in any EEA state (s10E(8)). This is separate to the ownership unbundling tests and transposes Article 11 of the Directives. Ofgem must notify the Secretary of State where an applicant for certification is made by a person from a non-EEA state or a person controlled by a person from a non-EEA state. The Secretary of State must prepare a report on whether the security of electricity supplies in the UK or any other EEA state would be put at risk by certification of the applicant.

The ownership unbundling requirement

6. The ownership unbundling requirement set out in s10F consists of five tests, all of which must be satisfied:

   (1) s10F(2): the applicant:
      a. does not control a relevant producer or supplier;
      b. does not have a majority shareholding in a relevant producer or supplier;
c. will not, on or after the relevant date, exercise shareholder rights in relation to a relevant producer or supplier (Ofgem may rely on an undertaking that the applicant will not exercise shareholder rights: s10F(3));

(2) s10F(4): none of the applicant’s senior officers has been, or may be, appointed by a person who:
   a. controls an electricity undertaking which is a relevant producer or supplier, or
   b. has a majority shareholding in an electricity undertaking which is a relevant producer or supplier;

(3) s10F(5): none of the applicant’s senior officers is also a senior officer of an electricity undertaking which is a relevant producer or supplier;

(4) s10F(6): the applicant is not controlled by a person who controls a relevant producer or supplier;

(5) s10F(8): the applicant is not controlled by a person who has a majority shareholding in a relevant producer or supplier.

But where the fourth and fifth tests are not passed, Ofgem may treat them as passed (s10F(7) and s10F(9)) if:

   a. the control over the applicant was gained through the exercise of a right conferred as a condition of the provision of either financial support or a guarantee (or both) in relation to the applicant’s business, or
   b. the control over or majority shareholding in the relevant producer or supplier was gained through the exercise of such a right.

7. A ‘relevant producer or supplier’ is defined in ss10O(3)-(5):

(3) In this Part “relevant producer or supplier”, in relation to an applicant for certification or a certified person, means a person who falls within each of subsections (4) and (5).

(4) A person falls within this section if the person—
   a. is an electricity undertaking;
   b. gets natural gas from its natural condition in strata otherwise than as an unintended consequence of the storage of gas, and requires a licence under section 3 of the Petroleum Act 1998 (licences to search and bore for and get petroleum) to do so or would require such a licence if getting the gas in Great Britain;
   c. produces any other gas, including in particular biomethane, which is suitable for conveyance through pipes to premises in accordance with a licence under section 7 of the Gas Act 1986;
   d. supplies to any premises gas which has been conveyed to those premises through pipes;  
   e. arranges with a gas transporter for gas to be introduced into, conveyed by means of or taken out of a pipe-line system operated by that transporter; or
   f. otherwise sells gas,
   and terms used in paragraphs (b) to (f) of this subsection have the same meanings in those paragraphs as in Part 1 of the Gas Act 1986.

(5) A person falls within this subsection if the person carries out in an EEA state some or all of the activity by virtue of which the person falls within subsection (4) and—
   a. requires a licence under section 7A of the Gas Act 1986 (licensing of gas suppliers and gas shippers) or section 6 of this Act to do so;
   b. would, in the Authority’s opinion, require such a licence if carrying out the activity in Great Britain; or
   c. has a relationship with the applicant or certified person which the Authority thinks might lead the applicant or certified person to discriminate in favour of the person.
8. A **schematic diagram** of what is meant by ‘relevant producer/supplier’ can be found in **Annex C**.

9. Under the Electricity Act 1989 and the Gas Act 1986, the Secretary of State may issue licence exemptions on either a class or individual basis. There is a class exemption in place for electricity generators under 50MW, and DECC has a policy to grant individual exemptions for generators under 100MW.

10. The reference to licence holders in s10O(5)(a) means that a person who carries out the activity of generating or supplying electricity, or shipping or supplying gas, in GB but does not require a licence to do so (i.e. a person who is covered by a licence exemption\(^{15}\)) will not be covered by the definition of a relevant producer or supplier unless Ofgem considers that they have a relationship with the applicant that Ofgem thinks might lead the applicant to discriminate in their favour. This means that the unbundling requirements in s10F do not generally apply in respect of small generators.

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\(^{15}\) Note that our interpretation of s10O(5)(a) is that “requires a licence” must exclude exemption holders, rather than including any person who would require a licence if they did not hold an exemption; if it covered any person who carries out a prohibited activity, then the subsection would have no effect.
Annex C: Schematic of the “Relevant producer/supplier schematic”

“Relevant producer/supplier” or not per S10O(3), the Electricity Act 1989

- A gas / electricity generator / supplier
  - Activities in EEA?
    - Yes
      - Licensed or need to be licensed in the UK (eg > 50MW generation capacity)?
        - Yes: Relevant producer / supplier
        - No: Not relevant producer / supplier
    - No: Not relevant producer / supplier
  - No: Not relevant producer / supplier