Title: Maximising Economic Recovery of Offshore UK Petroleum:

Strategy

IA No: DECC0209

Lead department or agency: DECC

Other departments or agencies: OGA

Impact Assessment (IA)

Date: 28/01/2016

Stage: Final

Source of intervention: Domestic

Type of measure: Secondary legislation

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RPC: GREEN

Summary: Intervention and Options

	Cost	of Preferred (or more like	ly) Option	
Total Net Present Value	Business Net Present Value	Net cost to business per year (EANCB in 2014 prices)	In scope of One- In, Two-Out?	Measure qualifies as
£0.0m	£0.0m	£0.0m	Yes	£0.0m

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

Current regulatory powers are inadequate to ensure that private exploration and development will maximise the economic recovery of oil and gas from beneath the UK territorial sea and UK Continental Shelf (UKCS). The independent 'Wood Review' (the Review) was commissioned to establish how to secure maximum value from the UKCS. The Review identified several market failures including a quasi-public good, informational asymmetries, and co-ordination failures. A key recommendation the Review made for safeguarding the future of the basin – increasing value recovered from it to the benefit of both industry and Government – was to develop and commit to a Strategy for Maximising Economic Recovery (MER) from the UKCS.

The Infrastructure Act 2015 created an obligation upon the Secretary of State to produce a strategy, by April 2016, to maximise the economic recovery of UK petroleum which will be binding upon 'relevant persons', including the Oil and Gas Authority (OGA), petroleum licence holders, operators, the owners of upstream petroleum infrastructure and those planning and carrying out the commissioning of such infrastructure.

What are the policy objectives and the intended effects?

The Strategy sets out the high level obligations and required actions and behaviours that are binding on relevant persons and which will provide a framework for the OGA as it carries out its role as regulator of the UKCS. The Strategy will thereby enable the OGA to determine in the light of the facts of any specific situation it encounters, how best to proceed with the aim of meeting the Central Objective of maximising the economic recovery of UK petroleum.

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

Option One: A "do nothing" option. This was ruled out on the basis that it would not achieve the policy objectives as it would not establish the necessary binding obligations around MER UK. In addition, producing a strategy is a statutory requirement imposed by the Petroleum Act 1998, s.9F.

Option Two: This is the preferred option. It sets out obligations that enable the OGA to facilitate MER UK.

The Strategy contains a Central Obligation whereby relevant persons must, in the exercise of their relevant functions, take the steps necessary to secure that the maximum value of economically recoverable petroleum is recovered from the strata beneath relevant UK waters. It also sets out a series of Supporting Obligations,

Will the policy be reviewed? Yes. Within three	years.			P)	24
Does implementation go beyond minimum EU requiremen	ts?		N/A		
Are any of these organisations in scope? If Micros not exempted set out reason in Evidence Base.	Micro Yes	< 20 Yes	Small Yes	Medium Yes	Large Yes
What is the CO2 equivalent change in greenhouse gas emissions? (Million tonnes CO2 equivalent)				Non-f	raded:

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:

W leadsom

Date: 8/3/16

Summary: Analysis & Evidence

Policy Option 2

Description: The Strategy sets out the high level obligations and required actions and behaviours that are binding on relevant persons and intended to lead to MER UK outcomes.

FULL ECONOMIC ASSESSMENT

Price Base PV Base	Time Period	Net Benefit (Present Valu		nt Value (PV)) (£m)	
Year 2015	Year 2015	Years 10	Low: -	High: -	Best Estimate: £0.0m

COSTS (£m)	Total Transition (Constant Price) Year		Total Cost (Present Value)
Best Estimate	n/a	£0.0m	£0.0m

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

The Strategy is purposefully high level so that the Obligations therein can be applied to any material situation which may occur in the UKCS at any stage of the business cycle. As a consequence, it is not possible to accurately forecast the number or nature of circumstances that will transpire in coming years where the Strategy will lead to different outcomes relative to the baseline. Due to this uncertainty it has not been possible to quantify, in isolation, the potential costs to business associated with the implementation of the Obligations. A final holistic IA will quantify all costs associated with implementation of the Review's recommendations. By building upon the methodology in the initial Wood Review IA¹ that accompanied the Infrastructure Act 2015 the assessment will include the estimated monetised benefits of activity that is driven by the binding obligations in the Strategy (see Sections 6 and 8 below).

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

The costs of operating the OGA will be recovered from industry via a combination of a new Levy and a fees & charges scheme. Levy regulations came into effect on 1 October 2015 to cover costs to be incurred between then and 31 March 2016, as set out in the IA². The levy rates for future years will be set by reference to the OGA's Corporate Plans and will be set out annually in regulations. The final holistic IA will quantify the costs associated with the expansion in regulatory activity following the establishment of the OGA and implementation of the new Energy Bill powers (see para 3 below) which will be recovered from business via both the levy and fees & charges schemes.

BENEFITS (£m)	Total Transition (Constant Price) Years		
Best Estimate	n/a	£0.0m	£0.0m

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

By definition, the MER UK Strategy is intended to lead to more economic recovery of petroleum which in turn would significantly increase net value for the industry overall and the wider UK economy. However, as with costs the potential benefits have not been quantified due to the uncertainty around the number or nature of circumstances that will transpire in coming years where the Strategy will lead to different outcomes relative to the baseline. A final holistic IA will quantify all benefits associated with implementation of the Review's recommendations. By building upon the methodology in the initial Wood Review IA that accompanied the Infrastructure Act (2015) the assessment will include the estimated monetised benefits of activity that is driven by the binding obligations in the Strategy (see Sections 6 and 8 below).

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

Full implementation of the Review's recommendations is expected to result in significant net economic benefits for business and the UK economy as a whole. The initial Wood Review IA estimated these potential net benefits to be in the range £21bn-£56bn (NPV, 2014 prices) as a result of increased oil and gas extraction from the UKCS. The assessment of benefits and net impacts has not been updated as part of this IA, but the importance of doing so as part of the implementation and assessment programme is recognised, particularly in light of recent falls in oil and gas prices and the resulting impact on production forecasts. The assessment of potential benefits will therefore be updated in the holistic IAs accompanying the final phase of implementation.

¹ DECC, Impact Assessment, Implementation of the Wood Review Proposals for UK Offshore Oil and Gas Regulation, September 2014.

https://www.gov.uk/government/publications/impact-assessment-opinion-implementation-of-the-wood-review-proposals-for-uk-offshore-oil-and-gas-regulation

² DECC, Impact Assessment, Funding the Oil and Gas Authority (OGA): Levy, September 2015. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/459460/image2015-09-09-112154.pdf

Key assumptions/sensitivities/risks

Discount rate (%)

n/a

The Strategy defines the key concepts of "economically recoverable" and "satisfactory expected commercial return" as set out in Section 5 below. In assessing "economically recoverable" petroleum resources a 10% real discount rate will be used to bring costs and revenues to a common point for comparative purposes. The principles and safeguards in the Strategy will guide how the OGA conducts its regulatory duties. The OGA will be proportionate in its approach and in particular a safeguard ensures that obligations cannot be imposed where the immediate direct benefit would be outweighed by the resulting damage to investor confidence.

BUSINESS ASSESSMENT (Option 2)

Direct impact on business (Equivalent Annual) £m:			In scope of OITO? Measure qualific		
Costs: £0.0m	Benefits: £0.0m	Net: £0.0m	Yes	£0.0m	

Evidence Base

1. Background

- 1. In June 2013, the then Secretary of State for Energy and Climate Change asked Sir Ian Wood to conduct an independent review of oil and gas recovery from the UK Continental Shelf (UKCS), One of the central recommendations made by the 'Wood Review' Final Report³ for safeguarding the future of the basin was for Government and Industry to develop and commit to a new Strategy for Maximising Economic Recovery from the UKCS (MER UK). The Government accepted and is committed to implementing the Review's recommendations.
- 2. The Government committed to establishing the new Oil and Gas Authority (OGA) as an independent expert regulator and asset steward, empowered and equipped to bring industry together to drive common purpose. The OGA is already engaging with industry to drive down costs and improve efficiencies and to maximise economic recovery of offshore oil and gas reserves.
- 3. The OGA became an Executive Agency on 1 April 2015 and will transition to a Government Company in summer 2016, subject to Parliamentary approval of the Energy Bill. The new Energy Bill, which was introduced into the House of Lords on 9 July 2015, will vest the OGA as a Government Company and equip the body with additional powers to realise fully the benefits of recovering economic reserves of oil and gas from UK waters.
- 4. The Infrastructure Act 2015 set out the legal framework for the MER UK Strategy and created the Principal Objective of "maximising the economic recovery of UK Petroleum". It also created an obligation on the Secretary of State to produce a Strategy, by April 2016, for enabling this central objective to be met. The Strategy will be binding upon the OGA and other relevant persons which includes the Secretary of State, petroleum licence holders, operators appointed under those licences, the owners of upstream petroleum infrastructure and those planning and carrying out the commissioning of such infrastructure.
- 5. To that end the Strategy sets out a Central Obligation, Supporting Obligations and Required Actions and Behaviours that are binding on relevant persons. The Supporting Obligations clarify how the Central Obligation applies in certain circumstances and the Required Actions and Behaviours are obligations which apply to relevant persons when carrying out the Central and Supporting Obligations.

2. Problem under consideration

- 6. The Review was commissioned in recognition of the mature nature of the UKCS offshore basin and as a result the challenges facing both industry and the regulator in the years ahead. While some 43 billion barrels of oil equivalent (boe) have already been produced and remaining resources are estimated to be between 12 and 24 billion boe, it is clear that over the long-term recoverable reserves are on a declining path as the basin matures, resources are exhausted and become increasingly difficult or uneconomic to extract.
- 7. The 'UKCS Maximising Recovery Review' reported on its findings in February 2014. It identified the key challenges facing the industry and the need for the current regulatory arrangements to evolve accordingly. The report stated that the current regulatory licensing model was not the problem, noting that it works successfully in most countries which are not monopolised by national oil companies. It instead stated that the light touch regulation applied in the early days of large fields and large operators must now evolve to take account of a basin with over 300 fields operated by an

http://www.woodreview.co.uk/documents/IUCSV/20Mavimining//20Daggreent/

³ Wood Review (2014), UKCS: Maximising Economic Recovery Review [web], available at:

increasingly diverse mix of companies, much smaller new discoveries, many marginal fields and much greater interdependence in exploration, development and production.

- 8. The following key issues were identified in the Review:
 - a. The need for operators to focus on maximising economic recovery for the UK as well as pursuing their individual commercial objectives.
 - b. The need for fiscal stability consistent with the challenges of maturity.
 - c. The need for a greater resourced and more proactive Regulator.
 - d. The need for significantly improved asset stewardship.
 - e. The need for far greater constructive collaboration between operators.
 - f. The need for better implementation of industry strategies.

3. Rationale for intervention

9. The Government now has a central role to play in ensuring the stewardship and regulation of the hydrocarbon resources and the industry evolves in order to meet the new challenges facing the sector. The Strategy seeks to deal with the following market failures:

Quasi-Public Good

- 10. Under the current regulatory regime, licences grant firms exclusive rights to explore for, and produce oil and gas within a specified area. Licensing is necessary because firms must be assured of this exclusive right before they make the necessary investments to develop oil and gas fields, to prevent other firms 'free-riding' on their discoveries. Without exclusive licensing, the geophysical information that they acquire by incurring the costs of exploration would be available to other firms at zero cost. It would not be possible to exclude other firms from exploiting the oil or gas resource discovered, that is, they would be able to drill and extract the resource without having incurred the exploration costs. Licensing grants property rights, i.e. exclusive retention or exploration rights for specified areas, which address the non-excludability problem and thereby removes the disincentive to incur exploration costs.
- 11. It is the Government's view that granting exclusive rights to exploit an important national resource warrants regulation to ensure that it is exploited efficiently and in the nation's interest, for example to prevent 'land banking'. Land banking is where a firm buys or rents land cheaply and does not utilise it effectively, instead holding it to prevent other firms utilising the resource, or in the hope of exploiting it at a future point in time where prices are higher for the resource.
- 12. The MER Strategy aims to mitigate the risk of land banking, through its supporting obligation on exploration whereby the licensee of an offshore licence who has made a firm commitment to carrying out a work programme in respect of that licence must not relinquish the licence without first having completed the work programme as set out in the licence.

Co-ordination failures and dependencies

13. The present system for licences and exploration might lead to co-ordination failures as one company may not have strong enough incentives to invest alone but joint investment or multiple simultaneous investments might yield viable projects which are not economic in isolation. In addition some marginal investments may be dependent on prior or co-ordinated investments that may be difficult for the companies to make individually. 14. The MER Strategy sets out an obligation for cooperation whereby relevant persons will be expected to consider whether collaboration or co-operation with other relevant persons and those providing services relating to relevant functions in the region could reduce costs, increase economic recovery of petroleum or otherwise affect their compliance with the obligation in question. Where it is considered possible that such collaboration or co-operation might improve recovery, reduce costs or otherwise affect their compliance with obligations arising from or under this Strategy, relevant persons must give due consideration to such possibilities; and co-operate with the OGA.

Natural Monopoly

- 15. Owners of pipelines and other production infrastructure can have local monopolies and thus have substantial market power. In some cases this can result in the most effective allocation of resources for instance where there are increasing returns to scale/a downward sloping long run marginal cost curve. The presence of market power, however, lends scope to extract excessive rents. For instance, infrastructure owners might charge prices well above cost to developers for accessing services on or from their infrastructure, thereby adversely affecting the developer's profitability. That will not necessarily affect production levels as the infrastructure owners will simply be extracting a higher share of field developers' economic rent but the expectation that tariffs will be set above cost-reflective levels is likely to impact negatively on the incentive to explore. Therefore rules to govern third-party access to such infrastructure are required to prevent their owners from exercising substantial market power with the consequence that output might fall below the socially desirable level in the long run.
- 16. Such a regime already exists in relation to production capacity and pipelines in the Energy Act 2011, but does not extend beyond those matters. The MER Strategy therefore includes, through an obligation on asset stewardship (elaborated below in Supporting Obligations), the requirement that owners and operators of infrastructure must allow access to infrastructure on fair and reasonable terms. Where the infrastructure is not able to cope with demand for its use, there is an obligation to prioritise access which maximises the value of petroleum recovered.

4. Policy objective

- 17. Through the implementation of the recommendations in the Wood Review, the overarching policy objective is to establish a new regulatory regime which ensures that economic recovery of oil and gas is maximised through effective industry collaboration, exploration and production activity. This objective aligns with the Government's wider responsibilities on energy policy, including energy security and supporting growth and investment by making the most of existing oil and gas reserves.
- 18. One of the central recommendations made by the Review's Final Report was for Government⁴ and Industry to develop and commit to a new Strategy for Maximising Economic Recovery from the UKCS (MER UK). In accepting the recommendations from the Review, Government set out measures in the Infrastructure Act 2015 to establish the MER UK Strategy in legislation.
- 19. The Strategy will be an important legal document for the OGA in setting out at a purposefully high level the boundaries of the obligations on relevant persons and providing a framework for the OGA as it carries out its role as regulator of the UKCS. It will enable the OGA to determine in the light of the facts of any specific situation it encounters, how best to proceed with the aim of meeting the Central Objective of maximising the economic recovery of UK petroleum.

5. Description of options considered (including do nothing):

20. Two options were considered:

- Option One: A "do nothing" option. This was ruled out on the basis that it would not achieve
 the policy objective of developing a strategy to facilitate MER UK. In addition, producing a
 strategy is a statutory requirement imposed by the Petroleum Act 1998, s.9F.
- Option Two: This is the preferred option. It sets out in the form of a Strategy the Obligations
 that enable the OGA to facilitate MER UK.

Central Obligation

- 21. The Strategy contains a Central Obligation whereby relevant persons must, in the exercise of their relevant functions, take the steps necessary to secure that the maximum value of economically recoverable petroleum is recovered from the strata beneath relevant UK waters. It also sets out a series of Supporting Obligations in order to clarify the binding requirements that the Strategy places on relevant persons in different circumstances. In addition to these two tiers of obligations, the Strategy sets out Required Actions and Behaviours, which specify certain types of conduct which must be adhered to in demonstrating compliance, many of which derive directly from the recommendations in the Wood Review. Finally, in order to provide the appropriate balance, the Strategy sets out a series of fundamental Safeguards for industry in the application of the Central and Supporting Obligations and Required Actions and behaviours.
- 22. In drawing up the obligations imposed by the Strategy, regard has been had to the following high-level principles:
 - a. all stakeholders should be obliged to maximise the expected net value of economically recoverable petroleum from relevant UK waters, not the volume expected to be produced;
 - compliance with the Strategy is intended to lead to investment and operational activities that, on an expected basis, add net value overall to the UK;

⁴ Including the new Regulator the Oil and Gas Authority (OGA).

- c. compliance with the Strategy may oblige individual companies to allocate value between them, matching risk to reward. However, while the net result should deliver greater value overall, it will not be the case that all companies will always be individually better off;
- d. compliance with the Strategy will not lead to any individual company investing in a project or operating existing assets where there is not a satisfactory expected commercial return on that investment or activity. Such a return does not necessarily mean a return commensurate with the overall corporate return on their portfolio of investment, e.g. a low risk investment could give low returns; and
- e. in determining whether something is consistent with the principal objective the OGA will need to balance the benefit of economic recovery of petroleum with the need to maintain the confidence of new and current investors to invest in exploration and production of petroleum from relevant UK waters, taking into account market conditions at the time of making its determination.

Supporting Obligations

- 23. The Supporting Obligations are categorised as per the recommendations in the Wood Review under:
 - Exploration
 - Development
 - Asset Stewardship
 - Technology
 - Decommissioning

Exploration

- 24. The Strategy stipulates that the licensee of an offshore licence must plan, fund and undertake exploration activities including seismic and drilling activity of a type and in a manner which is optimal for maximising the value of economically recoverable petroleum from the license. The licensee of an offshore licence must also contribute to exploration activities which are optimal for maximising the value of economically recoverable petroleum that can be recovered from the region in which the licence is located, as set out in a plan produced by the OGA.
- 25. In addition the licensee of an offshore licence who has made a firm commitment to carrying out a work programme in respect of that licence must not relinquish the licence without first having completed the work programme as set out in the licence. In other words if a company has a licence to explore then it must do so or risk having to relinquish the licence. Where this obligation does not apply because a satisfactory commercial return cannot be achieved, the licensee must carry out a work programme of the same or a similar nature to the one set out in the licence or such other work programme as the licensee may agree with the OGA enables the Central Obligation to be met. This might be in respect of another licence held by that licensee.

Development

- 26. The strategy stipulates that the relevant persons must plan, commission and construct infrastructure in a way that meets the optimum configuration⁵ for maximising the value of economically recoverable petroleum that can be recovered from the region in which the infrastructure is to be located.
- 27. In considering the configuration required, relevant persons must give due consideration to:
 - whether or not any infrastructure proposed to be constructed under such a plan or commission could be of benefit to others, who are recovering petroleum from that region

⁵ In this context "configuration" includes not only the geographical placement of infrastructure, but also the sort of

- or who may begin to do so, by increasing the economic recovery of petroleum from that region⁶; and
- whether or not any infrastructure already in existence could be used in such a way as to reduce costs or otherwise increase the economic recovery of petroleum from the region.
- 28. This includes consideration as to whether any such infrastructure (whether proposed to be constructed or already in existence) could be so used if reasonable adjustments were to be made to it.

Asset stewardship

- 29. The owners and operators of infrastructure must ensure that it is maintained in such a condition and operated in such a manner that it will achieve optimum levels of performance, including production efficiency and cost efficiency, for the expected duration of production, taking into consideration the stage of field and asset development, technology and geological constraints.
- 30. Owners and operators of infrastructure must ensure that it is operated in a way that facilitates the recovery of the maximum value of economically recoverable petroleum from (as applicable):
 - the region in which it is situated; and
 - where the infrastructure is used by or for the benefit of others, the regions in which those others are situated.
- 31. This includes allowing access to infrastructure on fair and reasonable terms; and, where the infrastructure is not able to cope with demand for its use, prioritising access which maximises the value of economically recoverable petroleum.

Technology

- 32. The Strategy stipulates that relevant persons must ensure that technologies, including new and emerging technologies, are deployed to their optimum effect as set out in a plan produced by the OGA in maximising the value of economically recoverable petroleum that can be recovered from relevant UK waters, including in relation to decommissioning.
- 33. When considering whether to deploy new and emerging technologies in accordance with the above, relevant persons may have regard to:
 - the risks and uncertainties associated with such technologies; and
 - the potential benefits to the UK of the development and deployment of such technologies.

Decommissioning

- 34. Before commencing the planning of decommissioning of any infrastructure in relevant UK waters, owners of such infrastructure must ensure that all options for their continued use have been suitably explored, including those which are not directly relevant to the recovery of petroleum such as the transport and storage of carbon dioxide.
- 35. Relevant persons must decommission infrastructure located in relevant UK waters in the most cost effective way that does not prejudice the maximising of the recovery of economically recoverable petroleum from a region. Where the OGA produces a plan, it may identify particular pieces of infrastructure the decommissioning of which would prejudice the maximising of the recovery of economically recoverable petroleum in a region.

⁶ Here "region" means any area within relevant UK waters within which it is reasonable to expect that collaborative action could contribute to the fulfilment of the Central Obligation

OGA Plans

- 36. The OGA may produce a plan or plans which set out its view of how any of the obligations in the Strategy may be met. Such plans may address circumstances particular to a single or small group of relevant persons or may address circumstances at a regional level.
- 37. Any relevant person that intends to carry out activities in a manner which is inconsistent with any current plan produced by the OGA must first seek the views of the OGA. In addition, where the OGA intends to produce a plan, it must first seek the views of such relevant persons as it considers are likely to be affected by the proposed plan.

Required Actions and Behaviours

38. Any obligation arising from or under either the Central Obligation or one or more of the Supporting Obligations includes the requirements set out below.

Timing

39. All obligations must be complied with in a timely fashion.

Collaboration

- 40. When considering how to comply with obligations arising from or under the Strategy relevant persons must, where relevant:
 - consider whether collaboration or co-operation with other relevant persons and those
 providing services relating to relevant functions in the region could reduce costs, increase
 recovery of economically recoverable petroleum or otherwise affect their compliance with the
 obligation in question;
 - where it is considered possible that such collaboration or co-operation might improve recovery, reduce costs or otherwise affect their compliance with obligations arising from or under this Strategy, relevant persons must give due consideration to such possibilities; and
 - co-operate with the OGA.

Cost reduction

41. The obligations set out in and deriving from the Strategy require that the full lifecycle costs of the recovery of petroleum, including decommissioning, and operations relevant to such matters be reduced as far as possible

Actions where relevant parties decide not to ensure maximum economic recovery

- 42. Where relevant persons are not able to ensure the recovery of the maximum value of economically recoverable petroleum they must allow others to seek to do so from their licences or infrastructure including by divesting themselves of such licences or assets to other financially and technically competent persons.
- 43. This obligation in the preceding paragraph applies where relevant persons are unable to ensure the recovery of the maximum value of economically recoverable petroleum from their licences or infrastructure for financial reasons and are unable to secure investment from other persons within a reasonable timeframe. It also applies in all other circumstances where relevant persons decide not to ensure the recovery of the maximum value of economically recoverable petroleum from their licences or infrastructure, including where the reason for the decision not to recover is because recovery generates returns which are unsatisfactory to the relevant persons, they cannot raise suitable finance or there are technical or other non-economic reasons.

44. Where a relevant person is seeking to comply with the obligation in paragraph 42, that person must seek to do so without demanding compensation in excess of a fair market value or unreasonable terms and conditions, in order that other financially and technically competent persons who are able to recover economically recoverable petroleum may do so. Where after a reasonable period the relevant person is unable to secure MER by these means, if the recovery of maximum value of economically petroleum would achieve a satisfactory expected commercial return they shall relinquish the related licenses.

Safeguards

- 45. No obligation imposed by or under the Strategy permits or requires any conduct which would otherwise be prohibited by or under: any legislation, including legislation relating to competition law, health, safety or environmental protection; or the common law, including the OGA's duty to act reasonably.
- 46. No obligation imposed by or under the Strategy requires any person to make an investment or fund activity (including existing activities) where they will not make a satisfactory expected commercial return on that investment or activity. Where the Strategy requires a relevant person to make an investment or fund activity and that person intends either: (a) to delay that investment or funding or, (b) to not undertake that investment or funding; because it will not produce a return which they consider to be sufficiently high, the OGA must discuss the situation with that relevant person before taking any enforcement action in relation to that decision.
- 47. Where the Strategy requires a relevant person (A) to invest in infrastructure or fund activity wholly or partly for the benefit of another relevant person or persons (B):
 - A may require from B⁷ a contribution to the costs associated with installing and operating the infrastructure or carrying out the activity; but
 - That contribution shall not exceed one that is fair and reasonable in all of the circumstances, taking into account the importance of realising B's assets to meeting the Central Obligation.
- 48. No obligation imposed by or under the Strategy requires any conduct (including investment or funding activity) where the benefits to the UK deriving from that conduct are outweighed by the damage to the confidence of investors in oil and gas exploration and production projects in relevant UK waters.

Other significant concepts

- 49. The annex to the Strategy sets out definitions (see also assumptions section below) for the key concepts which largely reflect the definitions used in Part 1A of the Petroleum Act 1998. There are however two key concepts which will be important for the OGA in determining whether it considers the Obligations in the Strategy to have been met in any particular set of circumstances.
- 50. First, the concept of "economically recoverable" in relation to petroleum is the threshold above which the Strategy applies. It does not create any obligations in relation to the recovery of petroleum which is not economically recoverable. However, what is economically recoverable is not limited to what is economically recoverable by the relevant person who is incumbent on a licence or the current owner of infrastructure. The standard is the maximum value that is economically recoverable by any person. The intention here is to encourage and reward efficiency across relevant UK waters.
- 51. Second, the concept of "satisfactory expected commercial return" means an expected post-tax return that is reasonable having regard to all the circumstances including the risk and nature of the investment (or other funding as the case may be) and the particular circumstances affecting the relevant person;

⁷ Where B is comprised of more than one person the contribution required may be different for the different persons

52. While the Strategy regards the recovery of "economic" petroleum, the concept used here is one of "commercial return". This definition therefore expressly acknowledges that although there is a legal obligation to pursue economic petroleum, commercial operators cannot be expected to take on risks for a very marginal return. However, this concept of commercial is limited by what is "a reasonable return" in all of the circumstances. To that extent, projects which are low risk are likely to justify only a more modest return on investment whereas more complicated projects may reasonably justify a higher return.

6. Costs and Benefits

- 53. The Strategy is purposefully high level and the Central Obligation is, of necessity, generically worded so that it can be applied to any material situation which may occur in the UKCS at any stage of the business cycle. While being clear about the obligations placed on relevant persons, it also provides reasonable space for the OGA to determine, in the light of the facts of any specific situation it encounters, how best to proceed.
- 54. By definition, the MER UK Strategy is intended to lead to more economic recovery of petroleum subject to a satisfactory expected commercial return being achieved which in turn would significantly increase net value for the industry overall and the wider UK economy. It is recognised that in order to comply with the obligations and undertake additional activity pursuant with realising the expected net benefits, certain businesses will incur incremental expenditure (costs) relative to the baseline (i.e. prior to implementation of the Strategy, the new Energy Bill powers and forthcoming secondary legislation) across the areas of exploration, development, asset stewardship, technology and decommissioning. For example, in some instances this incremental expenditure and activity may flow from greater collaboration between operators while in other cases improved asset stewardship and technology may unlock the production of previously uneconomic resources.
- 55. As detailed in Box 1 below, the initial 'Wood Review IA'⁸ that accompanied the Infrastructure Act (2015) was based on the Review's headline findings that the recommended actions would have the potential to deliver an additional 3-4 billion barrels of oil equivalent (boe) over the subsequent 20 years, worth approximately £200 billion gross (undiscounted) to the UK economy (2014 prices). In estimating the resulting discounted benefits (net of industry investment costs) the IA employed a methodology that internalised the estimated incremental expenditure that would need to be incurred by industry in order to unlock the economic recovery of the estimated additional 3-4 billion boe. Previous IAs have also been produced which estimate the regulatory costs to business of complying with the Energy Bill powers and from the expansion in regulatory activity that will ultimately be recovered from business via both the Levy and fees schemes.
- 56. The previous estimates of expected benefits (and implicit costs) in the 'Wood Review IA' which are in part expected to be realised from the implementation of the obligations in the Strategy have not been updated as part of this IA. This is because it is not possible to forecast accurately the nature or number of circumstances that will transpire in coming years where the new binding requirements on relevant persons would, in isolation, result in different net impacts relative to the baseline. Consistent with the initial analytical approach, it is considered reasonable to view the implementation of the recommendations as a phased but holistic package of measures that on a cumulative basis are intended to deliver MER UK outcomes. The range of measures include those introduced to date in the Infrastructure Act (2015), the Levy Regulations, the Energy Bill and under the Strategy, but also the additional powers to be introduced via secondary legislation during the course of 2016.

⁸ DECC, Impact Assessment, Implementation of the Wood Review Proposals for UK Offshore Oil and Gas Regulation, September 2014.

https://www.gov.uk/government/publications/impact-assessment-opinion-implementation-of-the-wood-review-proposals-for-uk-offshore-oil-and-gas-regulation

- 57. In order to provide an updated assessment, DECC's intention is to prepare a comprehensive, holistic IA in line with the final phase of implementation of the Review's recommendations. The rationale for this approach is as follows:
 - Benefits will be estimated on the basis of the cumulative impact of the complementary
 package of measures introduced throughout the implementation programme. The
 assessment will therefore be undertaken using a consistent methodology and at the same
 point in time. This approach is considered more reasonable than undertaking a series of
 analyses that attempt to attribute a proportion of the overall expected benefits to each of the
 measures as they are introduced.
 - Costs to business arising from the expansion in regulatory activity (rather than direct incremental investment in oil and gas activities) under the Energy Bill powers which have been estimated in previous IAs will be reviewed and updated on a consistent basis where necessary. In addition, the costs of operating the OGA which result from an expansion in regulatory activity and that will ultimately be recovered from business via both the Levy and fees & charges schemes will be assessed. That assessment will be informed by the OGA Corporate Plan which will be published in early 2016 and include the levy requirement for 2016/17 and indicative estimates of the requirements to end 2019/20.
 - Assumptions used in previous IAs will be reviewed and updated where necessary to ensure that all costs and benefits are assessed on a consistent basis. In particular, the assessment will review the oil and gas price assumptions used in the initial analysis in light of the current low price environment and outlook. The resulting impact of these changes on production forecasts will also be considered, in terms of both baseline production from the UKCS and the potential incremental output that could be secured from implementation of the Review's findings.
 - Equivalent Annual Net Cost to Business (EANCB) estimates will be produced reflecting the
 outputs of the comprehensive assessment of all cost and benefit estimates. The EANCB can
 then be scored against the departmental account under the Business Impact Target (BIT).
- 58. The diagram in **Annex A** summarises the phased legislative implementation programme and the associated Impact Assessments that have been / will be produced by DECC.

Box 1. Summary of Wood Review (Infrastructure Act 2015) Impact Assessment Estimates and Methodology.

The Wood Review IA⁹ that accompanied the Infrastructure Act (2015) powers provided an early monetised assessment of the potential impacts associated with implementing the recommendations in the Review. The estimated of costs and benefits were based upon the headline findings in the Review, namely that full implementation of its recommendations would have the potential to deliver an additional 3-4 billion barrels of oil equivalent (boe) over the subsequent 20 years, worth approximately £200 billion gross (non-discounted) to the UK economy (2014 prices).

This additional output was estimated to derive from increased exploration activity, better stewardship, more efficient production, improved recovery and delayed decommissioning. The key quantified benefits identified in the Review were as follows.

- Increased rate of exploration estimated to deliver an additional 1.0-1.5 billion boe (Wood Review team analysis).
- Effective implementation of Enhanced Oil Recovery (EOR) estimated to deliver an additional 0.5-1 billion boe, ranging up to 6 billion boe in a best case scenario (DECC analysis);
- Improved use of infrastructure enabling an additional 0.5-2.0 billion boe to be recovered (Infrastructure Access Group report to PILOT May 2013); and
- Postponement of decommissioning (by five years on average), delivering an additional 1.0 billion boe (Wood Review team analysis).

Underpinning the analysis in the IA was the logical assumption that the incremental 3-4 billion boe would not be produced under the DECC baseline production projection as it would not be considered economically or commercially viable to do so given the associated full-cycle production costs. It was therefore assumed that as a result of implementing the recommendations the cost structure of these resources would be reduced to the average cost of those currently commercially viable and included in the then DECC baseline production projection over the period 2016-35.

The IA analysis recognised that to the extent the recommended actions lead to the intended changes in behaviour by licensees required to deliver the incremental output, there would be a level of expenditure/cost attached to these activities. As data is not available on estimated full-cycle production costs of each field or the average full-cycle cost of the potential incremental 3-4 billion boe it is was not possible to assess with accuracy either the average percentage cost reduction required to make these fields commercially viable or the overall investment required. Therefore, for the purposes of the analysis a simplifying assumption was made whereby the production costs of these currently non-viable fields reduced to the average in the baseline production projection. It may be considered that incremental production would on average have higher costs than in the baseline, due to the marginal nature of those fields. However, it was further assumed that the average cost of the baseline production should fall as a result of implementation of the Review's recommendations as costs would be the principal driver for increased recovery and efficiencies would then impact all production activity.

The estimated net revenue / benefit figures (£16.9 billion - £44.2 billion, NPV, 2014 prices)¹⁰ produced at that time in the IA therefore internalised and reflected the necessary level of investment/cost incurred by licensees across the life-cycle of activity (e.g. exploration, development, asset stewardship, technology and decommissioning) that would be required to secure incremental production of 3-4 billion boe. The IA also included estimated benefits of

⁹ DECC, Impact Assessment, Implementation of the Wood Review Proposals for UK Offshore Oil and Gas Regulation, September 2014.

https://www.gov.uk/government/publications/impact-assessment-opinion-implementation-of-the-wood-review-proposals-for-uk-offshore-oil-and-gas-regulation

¹⁰ The IA also included estimated benefits of £4.0bn - £12.3bn (NPV, 2014 prices) related to a reduction in the then projected baseline production costs which would be expected to result from implementation of the Review's recommendations. Estimated costs of £0.2bn (NPV, 2014 prices) were subtracted from total estimated benefits resulting in estimated net benefits of £20.7bn - £56.3bn.

£4.0bn - £12.3bn (NPV, 2014 prices) related to a reduction in the then projected baseline production costs which would be expected to result from implementation of the Review's recommendations. Estimated costs of £0.2bn (NPV, 2014 prices) which were estimated to result from the expansion in regulatory activity and the operation of the OGA were subtracted from total estimated benefits resulting in estimated net benefits of £20.7bn - £56.3bn. As outlined above, DECC's intention is to prepare a comprehensive, holistic IA in line with the final phase of implementation that will reassess all cost, benefits and net impacts associated with implementing the full package of measures.

Qualitative assessment - Scenarios for use of powers

59. While this IA does not, for the reasons outlined above, provide quantified estimates of the costs and benefits to business resulting from the Strategy, the following four illustrative scenarios are intended to set out areas in which the OGA may use the Strategy to require changes in industry behaviour. These are mapped against the key Supporting Obligations which are included in the Strategy and which underpin the Central Obligation to maximise economic recovery. These are not intended to prescribe a course of action which the OGA will take in any given scenario given that a number of other variables may influence the optimum outcome in any given case. Rather, they are intended to provide examples of how the Strategy will operate in practice.

Scenario A – Development / Asset Stewardship

- 60. The mature state of the UKCS means that production from a number of large long-established producing oil fields will continue to decline in the short and medium term and it will be important to ensure that smaller discoveries including those being undertaken by less well-established players are able to undergo development. This presents a number of challenges around the need to configure integrated infrastructure in a way which enables the maximum economic recovery of petroleum, which the strategy is intended to address.
- 61. It is possible to envisage a scenario where platform facilities (to which oil is transported for processing) in a large, well-established field have the spare capacity to accommodate oil processing from a smaller, related 'satellite' oil development and this may lead to competing economic interests, over which the OGA will be required to intervene. To illustrate, where there is more than one such potential satellite fields, it is likely that the host platform may have the capability to take only one.
- 62. Where the first, small development (Satellite A) has the same ownership interests as the host field and facilities, the owners may seek to use that infrastructure to progress their own development prospect, and may wish to submit a development plan to the OGA accordingly. However, where a second, larger development (Satellite B), owned by a third party, is also ready for development, that third party may approach the OGA to seek a determination of access terms to the host infrastructure citing that, in accordance with MER UK, recovery will be maximised by developing the larger satellite. In a case where either satellite could be developed, but not both, it is likely that the OGA will apply the obligations in the strategy in determining to which development it will grant access with a view to ensuring that prioritised access is given to the development which maximises the value of petroleum recovered. If the relevant company did not choose to follow the OGA's determination, then, ultimately, the OGA would have the option to issue sanctions for non-compliance with the Strategy (in accordance with the powers to be granted to the OGA under the Energy Bill).

Scenario B - Asset Stewardship

63. The Wood Review identified declining production efficiency as a barrier to maximising economic recovery, and this is one of the issues which the Strategy is intended to address. This, again, could be illustrated in a scenario where a company (Company A) is operating a mature field with declining production efficiency. The OGA will be able to assess the decline in production efficiency, - from say

80%, down to 60% - and the underlying causes of this decline which may include poor upkeep of existing infrastructure and/or insufficient staffing levels required to operate the field. It may also use its regulatory powers as defined under the Energy Bill (e.g. through access to joint-venture meetings) to understand the commercial basis for this decline – e.g. the company is looking to prioritise new development plans in other areas.

- 64. In such cases, the OGA may look to similar mature fields which are achieving better production-efficiency rates and may have successfully deployed improved business models to increase recovery rates. In such cases, the OGA may use this as a basis for work to improve Company A's production efficiency and, under the terms of the strategy, it will have the option to issue a plan, setting out its view of how the company should go about improving its production efficiency with a view to meeting its obligations under the Strategy.
- 65. Alternatively, the OGA may encourage Company A to relinquish its assets in the relevant field to an owner/operator who will improve production-efficiency rates. This is in accordance with the obligation in the Strategy which requires relevant persons to relinquish their assets, in cases where they decide not to ensure the maximum value of economic recovery of petroleum from their licences or infrastructure as determined by the OGA (including because that does not achieve a satisfactory return for them).
- 66. Ultimately, the OGA will be able to issue sanctions to support either course of action. The powers in the Energy Bill will enable the OGA to issue enforcement notices and/or financial penalties for non-compliance with the obligations in the Strategy (i.e. for non-compliance with a plan to improve production efficiency issued by the OGA). If necessary, it can also take steps to ensure that a more appropriate owner/operator takes control of the asset by revoking approval for an operator to carry out operations under a petroleum licence in cases where the Strategy is breached. Ultimately, it can revoke a company's licence to extract petroleum (although it is expected to that the OGA will need to consider this course of action only in rare instances).

Scenario C - Technology

- 67. The Wood Review found that a lack of investment in new techniques to improve oil recovery had impacted upon production efficiency and the ability to maximise economic recovery of UK petroleum. Accordingly, the Strategy places obligations upon relevant persons to ensure that technologies, including new and emerging technologies, are deployed to their optimum effect in maximising the value of economically recoverable petroleum that can be recovered from relevant UK waters.
- 68. To illustrate how a lack of investment in technology may impact upon MER UK, it is possible to envisage a scenario where a large multinational company is operating a maturing field at a recovery rate that does not align with the obligations imposed in the development plan under that company's licence. An independently commissioned report on the same field suggests that an investment in the development and application of enhanced oil recovery (EOR) technologies¹¹ would increase the overall recovery rate by 30%. However, the company may decide that the return from implementing such a project is too marginal and not commercially acceptable. In such a scenario, it is possible that smaller companies with experience of EOR projects may express a willingness to take over the field with a more ambitious approach to incorporating technology to support MER UK.
- 69. In the first instance, the OGA may take steps to identify and facilitate a solution which enables development of the relevant technology in a way which is commercially acceptable to the operator concerned. If this course of action were not sufficient to ensure compliance with the Strategy and the company still declined to make the necessary investment, then the Strategy may require the relevant company to relinquish their assets in the relevant field. As above, ultimately, the OGA would have

EOR is the implementation of various techniques for increasing the amount of oil that can be extracted from an oil

recourse to the sanctions that are included in the Energy Bill as a means of ensuring compliance with the Strategy.

Scenario D - Exploration

- 70. As set out above, the Strategy includes a requirement for the licensee of an offshore licence must plan and undertake exploration activities, including seismic and drilling activity, of a type and in a manner which is optimal for maximising the economic recovery of petroleum from the region in which the licence is located.
- 71. Key to this obligation is the expectation that the licensee of an offshore licence who has made a firm commitment to carrying out a work programme in respect of that licence must not relinquish the licence without first having completed the work programme as set out in the licence. Work programmes are generally contained in a schedule to each licence and place clear obligations upon the licensee and generally include provision for drilling of a well or wells within a required time period.
- 72. Whilst the provisions of the strategy will not add new requirements, beyond those already contained in work programmes (which are themselves a condition of petroleum licences), it will give the OGA additional leverage to ensure exploration activity is carried out in accordance with the terms of petroleum licences. The OGA will also have recourse to its more graduated system of sanctions, as set out in the Energy Bill, in cases where a company does not comply with these obligations.

Risks and Assumptions

- 73. The Government and the OGA are conscious of the delicate balance that needs to be struck between driving good outcomes for the UK economy overall and ensuring that investor confidence is retained and that the UKCS stays "open for business". As such, a safeguard is included (paragraph 5 of the Strategy) which ensures obligations cannot be imposed where the immediate direct benefit would be outweighed by the resulting damage to investor confidence. This aligns with provisions in the Energy Bill, under which the OGA, in exercising its functions (which include the development and enforcement of the MER UK Strategy), must have regard to the need to provide a stable and predictable system of regulation that encourages investment, as well as the need to work collaboratively with industry
- 74. Priorities for the OGA include the need to attract investment, facilitate cost reduction and increase competitiveness. The OGA is working hard with industry to tackle the current challenges being felt in the UKCS, which is coming to terms with a dramatic fall in revenues as prices have reduced. The principles and safeguards in the Strategy will guide how the OGA conducts its regulatory duties; the OGA will be proportionate in its approach, as demonstrated by the organisational structure it has decided to adopt, where there is separation between enforcement and asset stewardship activities, and where material enforcement decisions will be reviewed by the OGA Board. Much of the OGA's work will be in early facilitation, working closely with industry to increase value, as set out in the OGA's draft Corporate Plan¹².
- 75. It is also important to note that neither the Strategy, nor any other legal instrument, confers powers on the OGA which would allow it to intervene directly in private contracts. It may occasionally be the case that the OGA will find that a relevant person's contractual provisions place that person, or could place that person, in breach of the Strategy. In these cases, the OGA will explore the matter further with the persons concerned. It may be that, occasionally, the OGA will need to assert its right as a regulator to use its sanctions where a relevant person fails to avoid a breach of its MER responsibilities through continued reliance on contractual provisions which conflict with the Strategy.

¹² OGA Corporate Plan – Draft for Consultation, November 2015. https://www.gov.uk/government/consultations/oga-corporate-plan-draft-for-consultation

However, it will always be for the relevant person to decide for itself how to deal with that in terms of its contracts.

- 76. The Strategy defines "economically recoverable" in relation to petroleum as those resources which, having regard to the risk and nature of investment, could be recovered at an expected (pre-tax) market value greater than the expected (pre-tax) resource cost of their extraction, where costs include additional capital expenditure, operating costs and decommissioning costs but exclude sunk costs and costs (such as interest charges) which do not reflect current use of resources. In bringing costs and revenues to a common point for comparative purposes a 10% real discount rate will be used. The 10% real discount rate is an industry recognised generic rate for use in economic assessments of investment projects e.g. it is the established rate used by the OGA (previously DECC) in assessing a Field Development Plan (FDP) submitted by licensees¹³.
- 77. The Strategy defines "satisfactory expected commercial return" as an expected post-tax return that is reasonable having regard to all the circumstances including the risk and nature of the investment (or other funding as the case may be) and the particular circumstances affecting the relevant person.

Justification for the level of analysis

- 78. The Strategy is purposefully high level and the Central Obligation is, of necessity, generically worded so that it can be applied to any material situation which may occur in the UKCS at any stage of the business cycle (e.g. exploration, appraisal, production, decommissioning). While being clear about the obligations placed on relevant persons, it also provides reasonable space for the OGA to determine, in the light of the facts of any specific situation it encounters, how best to proceed. The qualitative and scenario based description of intended impacts contained in this Impact Assessment is therefore considered proportionate
- 79. As set out in paragraphs 53-57 above and Section 8 below, the intention is to prepare a comprehensive, holistic IA in line with the final phase of implementation of the Review's recommendations. The document will review and update where necessary all estimated costs and benefits in previous IAs relating to the implementation of regulatory measures to date and, furthermore, quantify the impacts related to the necessary secondary legislation. By reviewing and building upon the approach adopted in the initial Wood Review IA14 that accompanied the Infrastructure Act (2015) the assessment will cover the estimated monetised impact of activity that is driven by the binding obligations in the Strategy. In addition it will capture the impacts associated with the primary and secondary legislation related to the Energy Bill and the costs recovered via the levy and fees schemes which result from an expansion in regulatory activity following the establishment of the OGA. It is considered reasonable to view the implementation of the recommendations as a phased but holistic package of measures that on a cumulative basis are intended to deliver MER UK outcomes. The approach will ensure that the full costs and benefits to business and society as a whole arising from Wood Review Implementation are quantified on a consistent basis, including EANCB estimates and scored for Business Impact Target (BIT) purposes.

Wider Impacts

80. The wider impacts of the proposals in this Impact Assessment are consistent with those identified in the 'Implementation of the Wood Review proposals for UK offshore oil and gas regulation' Impact

¹³ See section 2.2 of OGA, Guidance on the Content of Offshore Oil and Gas Field Development Plans.
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/265842/FDP_guidance_notes_November_2013
web.pdf

¹⁴ https://www.gov.uk/government/publications/impact-assessment-opinion-implementation-of-the-wood-review-proposals-for-uk-offshore-oil-and-gas-regulation

Assessment¹⁵. This assessment will be revisited in line with the final phase of implementation and included within the final holistic IA.

7. Small and Microbusiness Assessment (SMBA)

- 81. The exact number of small businesses and microbusinesses (defined as having up to 49 FTE and 10 FTE employees respectively, as per BIS Better Regulation Framework Manual) in the exploration or production of the UKCS is unknown, however, both types of companies are active in this sector as licensees.
- 82. The Government believes that including businesses of all sizes in the policy will promote a higher level and more effective co-ordination by the new Regulator and will allow extracting the maximum benefit from the implementation of the MER UK Strategy. Small and microbusinesses will benefit from access to the infrastructure and the synergies resulting from joint field exploration and development that would not be achieved by excluding them from the policy. The intention is not to impose any disproportionate burden on companies of any size. A more detailed small and microbusiness assessment will be included within the comprehensive IA which will accompany the final phase of implementation.

8. Direct costs and benefits to business (OITO methodology)

- 83. The One-in, Two-out (OITO) rule ensures that any new regulatory measure that is expected to result in a direct net cost to business and civil society organisations must be offset by compensatory deregulatory measures providing savings to business of at least double that amount.
- 84. Whilst the measure is in scope of OITO, costs and benefits associated with measure have not been quantified at this stage. However, by definition, the MER UK Strategy is intended to lead to more economic recovery of petroleum subject to a satisfactory expected commercial return being achieved which in turn would significantly increase net value for the industry overall and the wider UK economy.
- 85. As detailed in Section 6 above, the earlier estimates of expected costs and benefits in the 'Wood Review IA' which are in part expected to be realised from the implementation of the obligations in the Strategy have not been updated as part of this IA. This is because it is not possible to forecast accurately the nature or number of circumstances that will transpire in coming years where the new binding requirements on relevant persons would, in isolation, result in different net impacts relative to the baseline. It is considered reasonable to view the implementation of the recommendations as a phased but holistic package of measures that on a cumulative basis are intended to deliver MER UK outcomes. The range of measures include those introduced to date in the Infrastructure Act (2015), the Levy Regulations, the Energy Bill and under the Strategy, but also the additional powers to be introduced via secondary legislation during the course of 2016.
- 86. To that end, DECC's intention is to prepare a comprehensive, holistic IA in line with the final phase of implementation of the Review's recommendations. The approach will enable the cumulative benefits of the complementary package of measures introduced throughout the implementation programme to be assessed on a consistent basis. In addition, all previously estimated costs (e.g. in relation to the Energy Bill powers and the introduction of the Levy) and underpinning assumptions will be reviewed and updated where necessary and included alongside and assessment of the estimated costs associated with the forthcoming secondary legislation. The assessment will thereby provide an estimate of the Equivalent Annual Net Cost to Business (EANCB) that reflects the full appraisal of

DECC, (2014), Implementation of the Wood Review proposals for UK offshore oil and gas regulation [web], available at: <a href="https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/370077/Implementation_of_the_Wood_Review_p_roposals_for_UK offshore_oil_and_gas_regulation_- IA.pdf

costs and benefits which can then be scored against the departmental account under the Business Impact Target (BIT).

9. Summary and preferred option with description of implementation plan

- 87. In summary, the MER UK Strategy contains a binding Central Obligation whereby relevant persons must, in the exercise of their relevant functions, take all steps necessary to secure the maximum economic recovery of petroleum from the strata beneath relevant UK waters. It also sets out a series of binding Supporting Obligations in order to clarify the binding requirements that the Strategy places on relevant persons in different circumstances. The Strategy will come into force by April 2016 in order to comply with the obligation in the Infrastructure Act 2015.
- 88. In addition to the MER UK Strategy, the Wood Review called for the development of a suite of six "Sector Strategies". The recommendation was that these would cover the following areas:
 - Exploration (including access to data)
 - Asset Stewardship (including Production Efficiency and Improved Oil Recovery)
 - Regional Development (starting with the Southern North Sea)
 - Infrastructure
 - Technology (including Enhanced Oil Recovery and Carbon Capture and Storage)
 - Decommissioning
- 89. The Sector Strategies will provide greater detail on the actions needed whether by Government, the OGA or industry to deliver MER UK in each of these sectors. Although the Sector Strategies are not binding (unlike the MER UK Strategy), it is expected that they will set out the OGA's expectations for what is required to deliver MER UK. These expectations will give industry further clarity on what behaviours or levels of performance the OGA will expect in order to achieve MER UK.

nnex A - Overview of the Wood Review Legislative Implementation Programme and Impact Assessments

