



Department
of Energy &
Climate Change

Levels of oil stocking obligations on UK companies

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The consultation and Impact Assessment can be found on DECC's website:

<https://www.gov.uk/decc>

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Foreword / Introduction

The UK holds emergency stocks of oil and refined products (such as petrol, diesel and aviation fuel) to release, in a co-ordinated fashion with other countries, to the international market in the event of a major oil supply disruption. These stocks can also be used to respond to domestic emergencies if required. The UK is obligated to hold these stocks by both the European Union and the International Energy Agency (IEA). The IEA has co-ordinated a stock release three times: in the lead up to the Gulf War in 1991, following the impact of Hurricanes Rita and Katrina in the US in 2005, and during civil disruption in Libya in 2011.

Each EU Member State must hold stocks totalling the higher volume of 61 days of total inland consumption or 90 days of net imports, with the UK currently obligated at the consumption-based level. The IEA obligation is 90 days of net imports. The final obligation on countries though must take into account a 10% discount for inaccessible stocks in tank bottoms and therefore the UK's obligation is in fact 67.8 days of inland consumption. However, as the UK becomes increasingly reliant on imports, as UK crude oil production declines, we expect to switch to the 90 day import level (or 100 days of imports, factoring in the 10% held in tank bottoms). We expect this switch to happen in the early 2020s, from which point the total UK obligation will grow in terms of volume.

The UK meets its obligations by directing oil companies, refiners and non-refiners (e.g. importers), who supply substantial amounts of oil products in the UK, to hold emergency stocks of oil and oil products. Company obligations currently differ between refiners and non-refiners. Refiners are obligated at 67.5 days of their supply while non-refiners are obligated at 58 days of their supply. This 9.5 day "differential," and the basis for it, was determined in 2006, and fully implemented in the UK by 2008; a reduction from a 19 day differential before the 2006 review. We have continued to keep this policy under review since then.

As a result of changes over time to the market share in the UK of refiners and non-refiners and an updated EU Oil Stocking Directive, introduced in 2013, we need to update our obligations on UK companies to ensure compliance with the EU obligation now and in the future.

This consultation considers a range of possible options to amend the UK approach to company obligations which would enable the UK to ensure compliance. The UK Government takes compliance issues very seriously; this is a consultation therefore on how to amend these to ensure UK compliance, not on whether the UK should be compliant.

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General information

Purpose of this consultation

The UK is obligated to hold emergency stocks of oil – by both the EU and the International Energy Agency (IEA) – primarily to release in a co-ordinated fashion with other member countries to the international market in the event of a major supply disruption. To meet our obligations, the UK Government directs oil companies (refiners and importers) who supply significant amounts of oil products in the UK to hold emergency stocks.

As a result of changes to refiner/non-refiner UK market share and a revised EU Oil Stocking Directive, which excludes certain stocks, implemented in the UK in December 2012, the levels of obligation placed on UK companies need revising to ensure compliance with our EU obligation.

A Government review of the levels of obligation on UK companies, and options for returning to compliance has therefore been necessary. The policy objectives of this review are two-fold:

- To ensure that the UK achieves compliance with the EU Directive in the near-term, following the revisions.
- To ensure that the UK's policy is such that compliance is guaranteed in the future.

We are not consulting on options for government-held stocks in this consultation; all options considered relate to changes to the levels of obligation on companies. DECC have been considering separately the possible option of a Central Stocking Entity, but this is not the subject of this consultation.

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Respond by: 23:45, 9 December 2015

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Consultation reference: URN 15D/452

Territorial extent:

This consultation covers the United Kingdom. Emergency stocks are a reserved matter and the oil stocking obligation will continue to cover the UK. Energy generally is devolved in Northern Ireland but oil stocking is not.

How to respond:

Your response will most useful if it is framed in direct response to the questions posed, though further comments and evidence are also welcome.

Responses should be emailed to deccdownstreamoilteam@decc.gsi.gov.uk

Hard copy responses can be sent to:

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Additional copies:

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Other versions of the document in Braille, large print or audio-cassette are available on request. This includes a Welsh version. Please contact us under the above details to request alternative versions.

Confidentiality and data protection:

Information provided in response to this consultation, including personal information, may be subject to publication or disclosure in accordance with the access to information legislation (primarily the Freedom of Information Act 2000, the Data Protection Act 1998 and the Environmental Information Regulations 2004).

If you want information that you provide to be treated as confidential please say so clearly in writing when you send your response to the consultation. It would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information we will take full account of your explanation, but we cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded by us as a confidentiality request.

We will summarise all responses and place this summary on the [GOV.UK website](http://gov.uk). This summary will include a list of names or organisations that responded but not people's personal names, addresses or other contact details.

Quality assurance:

This consultation has been carried out in accordance with the [Government's Consultation Principles](#).

If you have any complaints about the consultation process (as opposed to comments about the issues which are the subject of the consultation) please address them to:

DECC Consultation Co-ordinator
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Compulsory Oil Stocking Obligations on UK companies

Context

Emergency oil stocks are a critical tool to defend against the harmful impacts of major disruptions to global oil supply.

The UK is required to hold emergency stocks of crude oil and petroleum products to release to market in the event of short term oil supply disruption to bridge a gap in supply. The UK holds these stocks to comply with international requirements set by the EU and the IEA.

EU Requirements

Under the terms of the Oil Stocking Directive¹, the EU requires the UK and other Member States to hold stocks totalling the higher volume of either 67.8 days of total inland consumption (this equates to 61 days, after the 10% of oil in inaccessible tank bottoms has been removed) or 100 days of net imports (equal to 90 days, again having disallowed for the 10 per cent of inaccessible oil in tank bottoms). For the UK, as an oil producing country, our obligation is currently based on 67.8 days of inland consumption.

As UK crude oil production declines, and UK demand is increasingly met by imports, the volume of oil representing 100 days of average net daily imports (i.e. how much oil is imported over a 100 day period) will increase until this is greater than the equivalent volume for 61 days of consumption. DECC has produced forecasts to assess how the obligation is likely to change between now and 2030. Under DECC's central projection, we currently forecast that the obligation based on 100 days of imports will start to overtake the 67.8 days of consumption obligation in 2021.

IEA Requirements

As a member of the IEA the UK is also committed under the IEA's International Energy Program (IEP) in the Governing Treaty to:

- Maintain emergency oil reserves equivalent to at least 100 days of net oil imports (including the allowance for inaccessible oil in tank bottoms).
- Provide programmes of demand restraint measures to reduce national oil consumption
- Participate in oil allocation among IEA countries in the event of a severe supply disruption.

The text of the IEP is at: <https://www.iea.org/media/ieawebsite/about/iep.pdf>

¹ Council Directive 2009/119/EC of 14 September 2009 imposing an obligation on Member States to maintain minimum stocks of crude oil and/or petroleum products.

How the Obligations are managed in the UK

DECC meets the UK's obligations by requiring oil companies to hold stocks if they supply significant amounts of oil and oil products to the UK market.

To meet our IEA and EU obligations, the UK Government directs individual oil companies, who supply substantial amounts of oil products in the UK to hold emergency stocks that could be released in an emergency. The Oil Stocking Order 2012 sets out when a person can be considered a “substantial supplier”, which is broadly where their supply exceeds 50,000 tonnes of crude liquid petroleum or petroleum products at any point during a year.

The DECC Secretary of State is able to direct companies to hold stocks using powers under the Energy Act 1976 (“the 1976 Act”) and the Oil Stocking Order 2012 (“the Order”). Under current policy and legislation, around 20 companies are obligated.

DECC issues details of individual company obligations on a quarterly basis. These are calculated with reference to each company’s supply to market over a 12 month period, beginning 18 months before the obligated quarter and ending six months prior to the obligated quarter. More detail on the way in which the obligation is calculated can be found in DECC’s online guidance notes:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/401952/Guidance_for_Stakeholders_version_FEBRUARY_2015.pdf

Companies meet their individual obligations by holding oil or oil products in either their own facilities in any EU Member State, or by arranging for another company to hold stocks on their behalf (this is done through contracts known as ‘tickets’). Tickets require approvals from the UK and (if the ticket is for stocks held outside of the UK) the other EU Member State government. In the UK, it is left to the market to decide how and where best to hold these emergency stocks. At present there is a good geographical spread of stock held along the extent of the supply chain, but DECC continues to review the distribution/location of where these stocks are held, and method of stockholding.

Obligated companies fall into two main categories: refiners and non-refiners.

- Refiners are those companies whose business is to produce oil products from crude oil, though they will also import significant and increasing amounts of oil, particularly diesel and jet fuel. There are currently eight companies obligated in this group in the UK. **All Refiners are obligated at 67.5 days of supply.**
- Non-refiners (e.g. importers) are those companies who do not have a refining operation operating within the UK, but who source their product from imports they bring into the UK or from other companies that produce or import products. **All non-refiners are obligated at 58 days of supply.**

The gap between the level of obligation on refiners and importers is known as the ‘differential’. There has been a ‘differential’ in place between the level of obligations on different types of companies for many years. In the UK, in the absence of established guidelines, the differential has historically been based on the different Minimum Operating Requirements (MOR) of company-types. The MOR is an indication of the level of stocks different types of operators generally have in their facilities to remain operational. This was last reviewed in 2006, at which point it was concluded that the differential should reduce from 19 days as it had been, to 9.5 days. This was largely on the basis that MOR for refiners was 9.5 days higher than non-refiners. At that same review point in 2006 it was decided to change the companies obligated as well; retailers were no longer to receive directions to hold stocks, and instead we would look

to obligate significant suppliers and those involved in importing fuel to the UK alongside the refiners.

Ensuring compliance with international obligations & the case for changes to company obligations

As a result of structural changes in the UK's downstream oil sector and a revised EU Oil Stocking Directive, which excludes certain stocks, the levels of obligations placed on UK companies need to be amended in order to ensure compliance now and in the future.

In 2006, when the current differential was set, these levels of obligations on refiners and importers enabled the UK to be compliant with its total EU obligation.

Prior to 2013, the gap between the level of stocks companies are directed to hold (all refiners at 67.5 days and non-refiners at 58 days) and the total obligation on the UK (67.8 days) had been covered largely by commercial stocks (stocks held by companies over and above their obligation). Since the new EU Oil Stocking Directive came into force at the end of 2012, commercial stocks can no longer be counted toward the UK obligation.

Another key factor affecting compliance has been the changes that have happened to the UK midstream oil market in recent years. These changes include several UK refineries ceasing to operate, a scaling back of UK refining capacity, and their market share being, in part, picked up by importers. This has resulted in more of the UK's obligation being met by companies obligated at the lower level (58 days), which has exacerbated UK non-compliance. In recent years, the proportion of the obligation directed to refiners has shrunk whilst that directed to importers has risen. In the first quarter of 2009, around 80 per cent of the obligation was directed to refiners and by 2015 that had fallen to under 60 per cent, with importers being obligated for the remainder.

The UK Government takes compliance issues very seriously, and a change to the UK's oil stocking policy is therefore necessary in order to enable the UK to ensure compliance and remain compliant with its international obligations. This is important to maintain the credibility of oil stocking as an essential energy security measure.

In considering options to return to compliance, we are only considering changes to the levels of obligation placed on companies; we are not consulting on an option involving government-owned stocks. We have conducted a thorough review of both the levels of obligation themselves and also the factors, including but not limited to MOR, that should be taken into consideration in setting these levels.

To help inform this review, DECC commissioned an independent assessment of the UK oil stocking market – carried out by IPA Energy & Water Economics and Muse, Stancil & Co in 2014. This assessment fed into DECC's own internal analysis to help determine what factors may affect the UK's non-compliance now and could affect it in the future.

The independent assessment found that the market changes including the growing importer market share are expected to continue, and will continue to directly impact the UK's ability to meet its obligations under the current differentiated system. Furthermore, the report found that from 2021 that the UK's overall obligation will start to increase as we move to an imports-based obligation due to continued decline of UK Continental Shelf production (UKCS), potentially climbing as high as 16 million tonnes crude oil equivalent (MT coe) by 2030 (it is currently approximately 12MT coe). The report sets out that these two factors will have a substantial impact to the UK's ability to meet its oil stocking obligations.

Furthermore, the report also assessed the net present costs on refiners and non-refiners of meeting the UK's forecast obligation under three scenarios; if we maintain the current 9.5 day differential, a 6 day differential, and no differential. The report identified that although changes in the differential may have a small effect on the impact on the cost of compliance, changes in market concentration of refiners and non-refiners, and the decline in UK Continental Shelf crude oil production will have a greater cost impact on compliance than any costs associated with changing the differential.

Copies of the independent report will be made available upon request.

In addition to the independent report and DECC's own analysis, we have considered information collected from stakeholders in response to questions about the differential in a consultation in 2013 on the future management of the compulsory oil stocking obligation in the UK (<https://www.gov.uk/government/consultations/future-management-of-the-compulsory-stocking-obligation-in-the-uk>). As set out in the Government Response to the consultation in 2014, there are distinct views from industry on the future of the differential, with, in general, refiners wanting it reduced or removed and non-refiners wanting it maintained or increased. In that consultation we also sought views on whether the range of companies obligated remained appropriate. The conclusion then was that the current range of companies and 50,000 tonne limit for being a 'substantial supplier' remained appropriate. Therefore we are not consulting on changes to these here, rather changes to the levels of obligation on refiners and non-refiners who meet the current 50,000 tonne 'substantial supplier' qualification.

Possible Alternative Approaches

We identified 4 policy options for re-setting the levels of obligation on UK companies, which, as part of an Impact Assessment, have been assessed against the objectives of:

- i. ensuring that the UK is compliant with the EU Directive in the near term; and
- ii. ensuring that the UK policy is such that compliance is guaranteed in the future. This takes into consideration the likely change of the level of UK obligation in 2021, and the need to be resilient to changes in the relative market share of refiners and non-refiners in the UK.

In the event of market changes/companies ceasing to produce, supply or use crude liquid petroleum or petroleum products/market exit then DECC considers how to apply the obligation in order to remain compliant with the UK's total stockholding requirement as quickly as possible. If no other company purchases the existing company or its assets then DECC considers whether other company obligations need to be revised to reflect this shortfall. DECC is not looking to change this approach.

We have also considered the options against a **base case**. This base case is not a policy for future oil stocking levels that has been decided upon, but rather a robust comparator for the options being considered. This assumes:

- i. no change to the level of obligation until 2021, meaning UK non-compliance until that point.
- ii. an increase in the levels of obligation for both refiners and importers from 2021 that returns the UK to compliance. This is not a policy position but is based on an assumption that if there was no change before a switch to the obligation being based on 90 days of imports, when that switch took place new directions would be set at a level to ensure compliance.

iii. no change in the 9.5 day differential.

In choosing policy options we have considered the above objectives regarding compliance. In addition we have reflected on whether Minimum Operating Requirements (MOR), on which the differential is currently based, remains an appropriate factor to consider in setting obligations on different companies (indications from industry are that MOR has remained relatively stable), and whether other factors, in particular those considered in the independent IPA study such as the substantial changes to the relative supply to market from non-refiners compared with refiners in recent years and the expected increase in size of the total obligation, are more relevant going forward.

We have chosen options that test various ways to meet our objectives including with either a 9.5 day differential or no differential at all. We have not chosen an option that proposes a differential of a different size (i.e. greater than zero days, but not 9.5 days), aside from the first phase of the two-phase Option 3 (see below).

The independent assessment, carried out by IPA noted that a smaller differential, 6 days, potentially provided, according to their analysis, the lowest net present cost of the options tested. However, this was only by a small degree, and such a change to the differential would require very regular review to reflect market changes to ensure ongoing compliance which could also lead to greater uncertainty for industry, and greater administrative burden for government. Hence our choice to only test options that, in the end, either maintain the differential at its current size (9.5 days) or remove it entirely.

The end result of the differential being removed entirely is, in effect, that companies' relative contribution to oil stocking is comparable to their relative share of supply to the UK market compared with other obligated companies, and based on the obligated company's historic supply. The benefit of this is a system that is more responsive to any market changes in the future, allowing continued compliance without the need for regular review of the approach to the levels of obligations on companies.

Consultation Question

1. Do you agree with the assessment that:
 - Changes to the total size of the UK obligation and any future changes to market share of refiners and non-refiners will have a substantial impact to the UK's ability to meet its oil stocking obligations?
 - That these factors are now a more appropriate basis for setting the obligations, rather than a company's operating model, in order to ensure on-going compliance?Are there other factors that should be considered?

The options we are considering are set out below, along with a table showing the obligations on refiners and non-refiners at the 'start date' and 'Year 5' under each option, and a net present value of each option against the base case. The 'start date' in the options is July

2016², which allows for a decision at the turn of the year, and then 6 months' notice for companies to prepare for their new obligations. 'Year 5' is 2021. 'Year 5' has been chosen to allow companies time to adjust to more substantial changes; although it does take into account the forecast that this point is when the UK would switch to a total obligation of 90 days imports, it does not mean that if this change took place later, the switch date for changes to the level of company obligations would be postponed. If the change happened sooner, however, the government would need to consider any impact on non-compliance.

A range of assumptions have been used in assessing the four options. These include that incremental obligation changes are met through the purchase of tickets rather than physical stocks, and the UK will continue to count 'offshore stocks'³ towards its international obligation. If these stocks were no longer able to be counted towards the UK overall obligation then industry obligations would need to be increased to cover this shortfall.

More detail on each option, and the assumptions behind them, is set out in the associated Impact Assessment. We would encourage stakeholders to consider the Impact Assessment in detail alongside this consultation document when preparing their responses.

Consultation Question

2. Are you content with the assumptions behind the IA? We would welcome on all assumptions, but it would be helpful in particular to have views on:
- The assumption that additional obligations will be met through tickets.
- Are there addition considerations we should take into account (for example capacity in the European ticket market)?

Options considered

- **Option One:** as per the base case, but with an increase in the level of obligation on both refiners and non-refiners in July 2016 to ensure compliance. This option meets the objective of ensuring compliance in 2016, but because the differential is maintained means the system would not be more resilient to further changes in market share.
- **Option Two:** as per the base case, but eliminating the differential between refiners and importers in 2021. This option would, however, result in UK non-compliance before this date. From 2021 the system would be more resilient to future changes in market share.
- **Option Three:** Increase the obligation on non-refiners in July 2016, which will reduce the differential to 5 days, ensuring UK to compliance in the near term. In 2021, remove the differential altogether, whilst increasing overall obligations to reach compliance with the 2021 obligation.
- **Option Four:** In contrast to the base case, eliminate the differential entirely in July 2016, with non-refiners obligations increasing to the current level on refiners. This results in

² The start date for options is assumed to be July 2016, although the actual start date will be six months from a final decision – intended to take place at the turn of 2016.

³ Constantly replenished stocks related to North Sea production.

compliance from 2016. Both refiners and non-refiners' obligations would then increase in 2021 in line with increases in total obligation. Although this option meets both core policy objectives, it does so at a high cost to the sector. By removing the differential completely in 2021, the UK would hold more stocks that needed to ensure compliance, with this additional cost being met by importers.

The table below sets out the key changes for each option, the cost in net present value terms and whether they meet our two objectives. More detailed analysis on this can be found in the Impact Assessment published alongside this consultation.

Option	Start date (July-2016) days obligation		Year 5 (2021) days obligation		Objectives		Cost (£m) Net Present Value (compared to base case) July 2016 - 2025
	Refiner	Non-refiner	Refiner	Non-refiner	Compliance in near term	Compliance in future: more resilient to market change?	
Basecase	67.5	58	71.5	62	No	No	N/A
1	69.5	60	71.5	62	Yes	No	£-10.61
2	67.5	58	67.5	67.5	No	Yes	£0
3	67.5	62.5	67.5	67.5	Yes	Yes	£-10.11
4	67.5	67.5	67.5	67.5	Yes	Yes	£-21.35

Preferred Option

DECC is of the view that Option 3 is the most suitable option as it meets both objectives at the lowest NPV. It meets objective one by ensuring that the UK is compliant with stocking obligations in the near term. It also meets the second objective of being resilient to market structure changes in the long run. Having a phased transition also reduces cost to business.

We welcome comments and views from industry on this as the preferred option.

Consultation Question

3. Do you agree with our assessment that Option 3 is the most appropriate change in the levels of obligation to ensure compliance in the near-term and in the future? Please provide evidence to support your response.

The NPV of this policy is £-10.11m. This is driven primarily by the increase in obligation for non-refiners relative to the base case as the differential is reduced in July 2016.

The option to phase in higher obligations over a number of years reflects feedback from industry that companies have long-term contracts in place in order to meet company obligations and that the market would need time to react to the increased obligations, which

will be met by increased demand for tickets. However, the initial increase within six months reflects the need to ensure compliance with our total obligations in the near term.

Consultation Question

- | | |
|----|-----------------------------------------------------------------------------------------------------------------------------------|
| 4. | Do you feel the transition timetable is appropriate? Could this be reduced further? What should be taken into consideration here? |
|----|-----------------------------------------------------------------------------------------------------------------------------------|

In addition, it is considered that removing the differential will help improve transparency and long-term clarity for industry regarding oil stocking in the United Kingdom. This is because there should be less need for regular review of the levels of obligation to reflect changes in market structure.

Consultation Question

- | | |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5. | Any there any benefits or negative consequences, not identified in the Impact Assessment and consultation document which we should consider, of the options set out in this document and the associated Impact Assessment? |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Please provide evidence to support your response.

All options will be considered further once consultation responses have been received from stakeholders.

We intend to publish our response at the turn of the year so that if there are any changes, companies will have time to prepare for their new obligations.

Summary of Consultation Questions

Consultation Question

- | | |
|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Do you agree with the assessment that: <ul style="list-style-type: none">- Changes to the total size of the UK obligation and any future changes to market share of refiners and non-refiners will have a substantial impact to the UK's ability to meet its oil stocking obligations?- That these factors are now a more appropriate basis for setting the obligations, rather than a company's operating model, in order to ensure on-going compliance? |
|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

	Are there other factors that should be considered?
2	<p>Are you content with the assumptions behind the IA? We would welcome on all assumptions, but it would be helpful in particular to have views on:</p> <ul style="list-style-type: none"> - The assumption that additional obligations will be met through tickets. <p>Are there addition considerations we should take into account (for example capacity in the European ticket market)?</p>
3	Do you agree with our assessment that Option 3 is the most appropriate change in the levels of obligation to ensure compliance in the near-term and in future? Please provide evidence to support your response.
4	Do you feel the transition timetable is appropriate? Could this be reduced further? What should be taken into consideration here?
5	<p>Any there any benefits or negative consequences, not identified in the Impact Assessment and consultation document which we should consider, of the options set out in this document and the associated Impact Assessment?</p> <p>Please provide evidence to support your response.</p>

