

<b>Title: Impact Assessment for the Acetylene Safety (England and Wales and Scotland) Regulations 2014</b> <b>IA No: HSE0084</b>  <b>Lead department or agency:</b> Health and Safety Executive <b>Other departments or agencies:</b>	<b>Impact Assessment (IA)</b>		
	<b>Date:</b> 07/02/2014		
	<b>Stage:</b> Validation		
	<b>Source of intervention:</b> Domestic		
	<b>Type of measure:</b> Secondary legislation		
	<b>Contact for enquiries:</b> Alexander.Tsavalos@hse.gsi.gov.uk		

<b>Summary: Intervention and Options</b>	<b>RPC Opinion:</b> Green
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Cost of Preferred (or more likely) Option			
Total Net Present Value	Business Net Present Value	Net cost to business per year (EANCB on 2009 prices)	In scope of One-In, Two-Out? Measure qualifies as
£0m	£0m	£0m	Yes   Zero Net Cost

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

As part of the Löfstedt Review of Health and Safety in the UK, it was recommended that sector-specific consolidations of regulations should be undertaken. The Government has accepted this recommendation and seeks to consolidate six legislative elements covering compressed acetylene into one. This will remove unnecessary legislation and move towards a more straightforward legislative framework.

**What are the policy objectives and the intended effects?**

The aims of the consolidation are to remove regulatory burden on businesses and legislators, whilst at the same time maintaining current health and safety standards. The consolidation also seeks to future-proof the acetylene legislation so that costly piecemeal amendments can be avoided as far as possible in the future.

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

Option 1: Do nothing.

Option 2 (preferred option): Consolidate existing compressed acetylene legislation into one piece of legislation. This follows recommendations in the Löfstedt Review, which have been accepted by the Government. This option would also remove obsolete requirements of formal HSE approval of flame arrestors and for the import of acetylene containers. The proposed option has been supported by industry through consultation and is therefore the preferred one.

**Will the policy be reviewed?** It will be reviewed. **If applicable, set review date:** 10/2019

Does implementation go beyond minimum EU requirements?			N/A		
Are any of these organisations in scope? If Micros not exempted set out reason in Evidence Base.	<b>Micro</b> Yes	<b>&lt; 20</b> Yes	<b>Small</b> Yes	<b>Medium</b> Yes	<b>Large</b> Yes
What is the CO <sub>2</sub> equivalent change in greenhouse gas emissions? (Million tonnes CO <sub>2</sub> equivalent)			<b>Traded:</b>		<b>Non-traded:</b>

*I have read the Impact Assessment and I am satisfied that (a) it represents a fair and reasonable view of the expected costs, benefits and impact of the policy, and (b) that the benefits justify the costs.*

Signed by the responsible Minister:  Date: 12.05.14

# Summary: Analysis & Evidence

Policy Option 1

Description: Do nothing option

## FULL ECONOMIC ASSESSMENT

Price Base Year	PV Base Year	Time Period Years	Net Benefit (Present Value (PV)) (£m)		
			Low: Optional	High: Optional	Best Estimate: 0

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	Optional	Optional	Optional
High	Optional	Optional	Optional
Best Estimate	0	0	0

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

This is the baseline option and therefore there are no costs

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

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	Optional	Optional	Optional
High	Optional	Optional	Optional
Best Estimate	0	0	0

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

This is the baseline option and therefore there are no benefits.

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

Key assumptions/sensitivities/risks	Discount rate (%)	N/A
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## BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:	In scope of OITO?	Measure qualifies as
Costs: 0	No	NA
Benefits: 0		
Net: 0		

# Summary: Analysis & Evidence

# Policy Option 2

**Description:** Consolidation of sector specific acetylene legislation

## FULL ECONOMIC ASSESSMENT

Price Base Year	PV Base Year	Time Period Years	Net Benefit (Present Value (PV)) (£m)		
			Low: Optional	High: Optional	Best Estimate: 0

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	Optional	Optional	Optional
High	Optional	Optional	Optional
Best Estimate	0	0	0

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

There will be no material changes to the standards industry are expected to comply with, and as such the only costs will be from familiarisation. The number of dutyholders is very small, and these dutyholders have been consulted regularly, both formally and informally, and are fully aware of the changes being made, therefore familiarisation costs are expected to be negligible.

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

No other costs have been identified.

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	Optional	Optional	Optional
High	Optional	Optional	Optional
Best Estimate	0	0	0

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

No benefits have been monetised.

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

There is an un-quantified benefit associated with consolidating the current legislation in helping to counteract the impression that acetylene legislation is complex, confusing and out of date. The proposal will also separate acetylene from wider explosive regulations and the potential confusion caused by high pressure acetylene being 'deemed' an explosive will be removed. The consolidation will also remove the need for further costly 'piecemeal' legislative updates, and there will be negligible administrative savings.

<b>Key assumptions/sensitivities/risks</b>	<b>Discount rate (%)</b>	3.5
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## BUSINESS ASSESSMENT (Option 2)

<b>Direct impact on business (Equivalent Annual) £m:</b>			<b>In scope of OIOO?</b>	<b>Measure qualifies as</b>
Costs: 0	Benefits: 0	Net: 0	Yes	Zero net cost

## Background

1. Acetylene gas is extremely flammable and becomes unstable under pressure and can in some circumstances detonate, even in the absence of oxygen. It is commonly used as a welding and cutting gas, as it can burn with a flame much hotter than other gases.
2. The following legislative elements currently exist to address the regulation of compressed acetylene:
  - Order of the Secretary of State No.5 1898.
  - Order of the Secretary of State No.5A 1905.
  - Order of the Secretary of State No.9 1919.
  - Order in Council No.30 1937.
  - Compressed Acetylene Order 1947.
  - Compressed Acetylene (Importation) Regulations 1978.
3. There are also a number of generic and company-specific exemption certificates that have been made under the Explosives Act 1875 (Exemptions) Regulations 1979.
4. Acetylene regulation has been separated from the main Explosives Legislative Review (ELR) work and they have had separate impact assessments undertaken because:
  - Acetylene is not classified as an explosive and is not a part of the explosives sector. It was 'deemed' an explosive so that powers of the Explosives Act 1875 (EA) could be used for its regulation.
  - Acetylene regulation is a narrower issue than the main ELR, with limited uses and only two manufacturers/main distributors.

## Rationale for intervention

5. Following a recommendation in Professor Ragnar Löfstedt's review of Health and Safety<sup>1</sup>, HSE is moving forward with proposals for consolidation of sector-specific acetylene legislation.
6. HSE has engaged with key stakeholders in the industry in order to deliver the necessary technical consolidation to the Regulations. Stakeholder input has helped to improve the clarity of the consolidated regulations and focus attention of the key elements for retention.
7. The rationale for intervention is:
  - Current acetylene regulation is complex and does not align well with the modern, more straightforward, approach to health and safety;
  - It is Government policy to remove unnecessary regulation.
8. The current standards are considered by both HSE and the industry to be fit for purpose. There is no need to revise the physical controls for acetylene as they directly reflect the physico-chemical properties of the gas under pressure which remain unchanged.
9. HSE is also taking this opportunity to remove obsolete legislation requiring formal HSE approval of flame arrestors and for the import of acetylene containers. This is a minor deregulatory measure aimed at removing what is essentially duplication, as other legislative standards set acceptable limits on these objects anyway.

## Policy objective

10. The primary objective is to reduce the regulatory burden on business and regulators through consolidation and simplification. The review has sought to involve all interested parties and deliver a consolidated and integrated suite of modern Acetylene legislation.

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<sup>1</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/66790/lofstedt-report.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/66790/lofstedt-report.pdf)

11. The review will also assist in reducing the policy costs of regulation, for example, by eliminating the need for short-term piecemeal amendment of regulations and reducing the need for future major revisions, and assist in reducing the amount of regulation, for example, by reducing the total number of regulations through more effective integration and amalgamation of the numerous Orders and amending Regulations into a single set of regulations.
12. The intervention will replace the current ageing and complex acetylene regulatory framework with a new, easier to interpret regulation that does not alter the practical measures or operating standards required to comply with the law.
13. The intended effects are to:
  - Maintain current dutyholder risk-control measures;
  - Reduce red tape/confusion by streamlining regulations, and
  - Make the regulations more future-proof.
14. Lord Young's report *Good Health and Safety, Good for Everyone*<sup>2</sup>, the recommendations of which have been accepted by the Government, outlined the next steps in the Government's plans for reform of the health and safety system in Britain. The Government believes the regulation of these major hazard industries to be soundly based and in accordance with best international practice. The report highlighted the need to continue with a programme of modernisation of regulatory approaches and co-operation between regulators to provide a consistent and proportionate approach for business. The consolidation of acetylene legislation, as part of the wider Explosives Legislative Review, is designed to meet that objective.

## Options Considered

### Option 1: Do Nothing (Baseline)

15. In this option, the existing regulations would continue as they are currently, with no changes. There would, however, be reputational costs to HSE, as the Löfstedt review has recommended changes to the Regulations which have been accepted by the Government.
16. This option is the baseline against which the other options for implementing Professor Löfstedt's recommendations are compared.

### Option 2: Consolidation

17. This is a consolidation of existing law, with the removal of legal duplication and a shift towards more straightforward regulations supported by user-friendly guidance. New law will replace old law, whilst maintaining the current policy position and expectation of dutyholder activity. The significant hazards posed by compressed acetylene to both users and those nearby are the result of its physico-chemical nature giving a potential for explosions and fire. These characteristics make any consideration of a non-regulatory approach unsustainable.
18. There are some minor deregulatory changes, namely, removing the need for formal HSE approval of flame arrestors and for the import of acetylene containers. These are expected to have minimal impact in practice and are primarily aimed at removing duplication of regulation.
19. During summer 2013, HSE consulted on consolidating all acetylene related statutory instruments ([www.hse.gov.uk/consult/condocs/cd257.htm](http://www.hse.gov.uk/consult/condocs/cd257.htm)). The consultation document was downloaded 1468 times and HSE received 23 responses. Where a view was expressed, the proposed approach of:
  - a. simplifying/consolidating existing acetylene regulation;
  - b. removing acetylene from the regulation of 'classical' explosives, and
  - c. clarifying the prohibition of solid acetylene,
 was either well supported or met with public indifference. No substantive objections were raised.

<sup>2</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/66745/good-health-and-safety.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/66745/good-health-and-safety.pdf)

## **Monetised and non-monetised costs and benefits of each option (including administrative burden)**

20. HSE have engaged with industry via working groups and the HSE website, and assumptions below are based on information gathered through this process. Industry is familiar with the issues involved due to the consultative approach taken by HSE.

### **COSTS**

#### ***OPTION 1: DO NOTHING***

21. The do nothing option is the baseline used to compare other options against. As such, there are no additional costs or benefits associated with option 1.

#### ***OPTION 2: Consolidation***

22. There are no compliance costs expected from this proposal.
23. The proposals will not favour or disadvantage any firm or type of firm or affect their ability to compete with others in the same market.
24. There will be no material changes to the practical workplace standards industry are expected to comply with. The changes are being made to the underlying regulation and as such, existing guidance would only require minimal editorial updates. Therefore, irrespective of the number of dutyholders in scope of the legislation, the costs they face as a result of this change are negligible.
25. Based on the responses to our public consultation, HSE understand that supplier-produced guidance would only require minor editorial changes to reflect the change in legal references, as HSE do not intend to alter the technological and operational standards that are required for the 'safe' use of acetylene. HSE will review this again following the public consultation and if it is not the case will address how this work is taken forward.

#### *Familiarisation*

26. There are in the region of 400,000 - 500,000 compressed acetylene gas cylinders in Britain and the vast majority will be used for metal welding and cutting operations<sup>3</sup>. There are currently two main distributors/retailers in Great Britain and one manufacturing site, with a second under construction. We estimate that they have in the region of 320,000 business customers between them. Many of these businesses will be SMEs, primarily vehicle repair and metal fabrication.
27. Also based on data gathered during consultation, it is assumed that these smaller customers who are acetylene users rely upon training and supplier-provided information, rather than actively refer to the existing legislation. We do not expect that the proposed changes would alter this behaviour.
28. Dutyholders refer to guidance as and when they need to. The changes made to current guidance, as mentioned above, will be purely editorial i.e. changing the references to regulations. We do not expect users to specifically familiarise themselves with any new guidance produced. Therefore, we expect that familiarisation costs will be negligible.
29. There were no objections to these assumptions during the consultation process.

### **BENEFITS**

30. There is an unquantified benefit associated with consolidating the current legislation. Without any intervention these 6 pieces of legislation would remain in force and contribute to the impression that acetylene legislation is complex, confusing and out of date. This work is one element of a much wider

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<sup>3</sup> Communication from the British Compressed Gases Association (BCGA).

programme of work to make the legislative framework simpler and easier to understand, while maintaining the same standards of protection for those in the workplace or affected by work activities.

31. The proposal will also separate acetylene from wider explosive regulations and the potential confusion caused by high pressure acetylene being 'deemed' an explosive will be removed.
32. There will be some minor administrative and financial savings from the limited elements of deregulation, namely, removing the need for formal HSE approval of flame arrestors and for the import of acetylene containers. These savings will be very limited, as this is a mature sector and such applications for approval are limited to only a few a year, with existing costs in the hundreds of pounds, and therefore it would be disproportionate to place a monetary estimate on the savings. The changes are not expected to have any impacts on health and safety outcomes due to these activities being covered by other standards and regulations, and the changes, in effect, would simply be removing the small administrative burden arising from having to seek approval from HSE, and the duplication of having unnecessary additional checks upon the existing standards.

### **Rationale and evidence that justify the level of analysis used in the IA (proportionality approach)**

33. This is sectoral consolidation as promoted in the Government's response to the Löfstedt report. It will not alter any of the practical controls currently found in the workplace, so will have minimal impact on those currently making, trading or using acetylene. There has already been considerable consultation in reviewing the acetylene regulatory framework in collaboration with GB acetylene producers and representatives of traders, users, and the fire and rescue services.
34. The user base is quite disparate. To ensure that HSE had not overlooked any subsector issues, the formal consultation gave stakeholders an opportunity for comment and there will be an adequate period prior to making new regulations. This is a relatively small and contracting sub-sector, with users increasingly moving to alternative gases and technologies.

### **General Assumptions**

35. The IA is prepared in accordance with the Better Regulation Framework Manual.

### **Direct costs and benefits to business calculations (One In Two Out, OITO)**

36. The proposal is in scope of OITO. However, it would not have a direct impact on business (costs and benefits to business are expected to be negligible, as explained above) and therefore is deemed as having a zero net cost to business.

### **Wider impacts**

#### *Competition*

37. It is not anticipated that the proposed changes will have an impact on competition. The Office of Fair Trading have four filter questions to decide whether a more detailed analysis of competition impacts is necessary, and these are answered as follows:
  - a. Does the policy directly limit the number or range of suppliers?
    - It is not thought the policy will directly limit the number or range of suppliers.
  - b. Does the policy indirectly limit the number or range of suppliers?
    - It is not thought the policy will indirectly limit the number of range of suppliers.
  - c. Limit the ability of suppliers to compete?
    - It is not thought the policy will limit the ability of suppliers to compete.
  - d. Reduce suppliers' incentives to compete vigorously?
    - It is not thought that the proposal will reduce suppliers' incentives to compete vigorously.

### *Small/Micro Firms and the Self employed*

38. We propose that these provisions will continue to apply to small/micro firms and the self employed. If hazardous forms of acetylene were placed outside of legislative control they could pose significant hazards to neighbouring businesses and members of the public. It is not thought the proposals will have a disproportionate impact on small firms. There will be no material changes to the existing standards dutyholders are expected to comply with. The changes are being made to the structure of the existing regulations, and in general, we do not expect businesses to seek to familiarise themselves with those changes. In addition, the simplification and consolidation of the legislation would benefit any small/micro firms or self employed user that wanted to consult the regulations directly.

### *Measures Beyond Minimum EU requirements*

39. There are no specific EU requirements relating to acetylene. However, the proposed simplified regulations will maintain the current long standing practical controls that are not fully addressed by EU regulations relating to explosive atmospheres or those directed towards true explosives.
40. Maintaining current controls will ensure that GB industry can continue to use acetylene in various garage, repair and engineering workshops with no reduction in the level of health and safety protection that employees and their nearby neighbours currently receive. .

### **Summary and preferred option with description of implementation plan.**

41. HSE is committed to implement Professor Löfstedt's recommendation replacing the current ageing and complex acetylene regulatory framework with a new, easier-to-interpret regulation that does not alter the practical measures or operating standards required to comply with the law.
42. In terms of implementation the proposal will form part of the Eighth Statement of New Regulations, May 2014 and it is expected it will be made law in October 2014.