

Title: EU Regulation on the Marketing and Use of Explosives Precursors IA No: HO0309 RPC Reference No: N/A Lead department or agency: Home Office Other departments or agencies:	Impact Assessment (IA)			
	Date: 28/03/2018			
	Stage: Consultation			
	Source of intervention: Domestic			
	Type of measure: Secondary legislation			
Contact for enquiries: CBRE Protect team precursorsandpoisons@homeoffice.x.gsi.gov.uk				
Summary: Intervention and Options				RPC Opinion: Not applicable

Cost of Preferred (or more likely) Option				
Total Net Present Value	Business Net Present Value	Net cost to business per year (EANDCB in 2014 prices)	One-In, Three-Out N/A	Business Impact Target Status N/A
-£4.6m	-£4.4m	£0.5m		

What is the problem under consideration? Why is Government intervention necessary?
The EU has adopted Delegated Regulations to add three substances (aluminium powder, magnesium powder, magnesium nitrate hexahydrate) to Annex 2 of EU regulation 98/2013 on the Marketing and Use of Explosives Precursors. Sulfuric Acid has been used in terrorist attacks in the UK and Europe recently even though it has been subject to reporting requirements. These substances have been identified as potential precursors for homemade explosives, and if they can be made available to the public by retailers, the likelihood of a successful terrorist attack may increase. Government intervention is necessary to deter and detect terrorist acquisition of explosive precursors and to comply with EU law.

What are the policy objectives and the intended effects?
The policy objectives are to:

- Prevent terrorists using explosives precursors in attacks.
- Provide a mechanism to alert authorities to terrorist activity.
- Minimise the burdens on industry and legitimate users.

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

- **Option 1:** Do nothing - make no changes, it does not meet the Government's objectives.
- **Option 2:** Full implementation - Move Sulfuric Acid from Part 3 to Part 1 of Schedule 1A of the Poisons Act 1972 (a national measure) and add all three substances (Aluminium Powder, Magnesium Powder and Magnesium Nitrate Hexahydrate) to Part 3 of Schedule 1A of the Poisons Act 1972 (implementing EU regulation). **This is the Government's preferred option.**

The main risk of Option 1 is it would not be fully compliant with EU law and could lead to infraction proceedings against the UK Government.

Will the policy be reviewed? It will be reviewed. If applicable, set review date: 01/2021				
Does implementation go beyond minimum EU requirements?			No	
Are any of these organisations in scope?			Micro Yes	Small Yes
			Medium Yes	Large Yes
What is the CO ₂ equivalent change in greenhouse gas emissions? (Million tonnes CO ₂ equivalent)			Traded: N/A	Non-traded: N/A

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: Caroline Nokes Date: 27th March 2018

Summary: Analysis & Evidence

Policy Option 2

Description: Full Implementation

FULL ECONOMIC ASSESSMENT

Price Base Year 2017	PV Base Year 2017	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: -£5.3m m	High: -£4.0m	Best Estimate: -£4.6m

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	£1.1m	£0.3m	£4.0m
High	£1.5m	£0.4m	£5.3m
Best Estimate	£1.3m	£0.4m	£4.6m

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

The largest estimated costs are licensing costs to home users (£0.2m NPV over 10 years) and administrative costs to businesses (£4.4m NPV over 10 years), in the form of provision of information to prospective buyers, processing and recording systems for licensed users, business checking, training programmes for staff and verifying which products are affected. The public sector cost of processing licences is expected to balance with licence income, which is priced at cost recovery.

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

The most significant cost that would be disproportionate to quantify is the loss of profit to business from this regulation and the impact on home users. Any additional costs for businesses are assumed to be low / negligible, in terms of reporting and monitoring and the labelling of products. Potential public sector costs apply, in ensuring that internet sales are compliant, maintaining reporting systems and any criminal justice costs resulting from prosecutions or appeals under the new offences.

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low			
High			
Best Estimate	Not Quantified	Not Quantified	Not Quantified

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

N/A

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

This policy aims to reduce the likelihood or impact of a potential terrorist attack using an Improvised Explosive Device. Regulation of public use for these high risk chemicals reduces the risk of misuse of these chemicals, and monitoring their use increases the likelihood of police interception of attempted attacks. Furthermore the increased attention may lead to a level of deterrence among potential offenders.

Key assumptions/sensitivities/risks

Discount rate (%) 3.5%

As most of the costs fall on business, the main sensitivity is around volumes. Estimates for the number of businesses affected have been informed by market research as well as expert opinion, and sensitivity analysis has helped to explore these estimates further. There is also a risk that businesses will not comply with the regulations, that the threat of misuse of these chemicals may not be reduced, or instead that the threat is displaced elsewhere.

BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:			Score for Business Impact Target (qualifying provisions only) £m:
Costs: £0.5m	Benefits: £0m	Net: -£0.5m	2.5

Evidence Base (for summary sheets)

A. Strategic Overview

A.1 Background

This impact assessment assesses the addition of new chemicals that can be used to make homemade explosives to existing control measures for sales.

EU regulation

EU Regulation 98/2013 on the Marketing and Use of Explosives Precursors was introduced into GB law as the Control of Explosives Precursors Regulations 2014 in September 2014 and subsequently transferred into a cohesive regime with controls of poisons under the Poisons Act 1972 (as amended by the Deregulation Act 2015). Northern Ireland has implemented separate legislation. Government intervention is required to ensure the UK continues to comply with EU law¹.

GB implementation

GB implementation of the EU regulation established a licensing regime for the sale of seven chemical precursors (Annex 1 of the EU regulation and Part 1 of Schedule 1A to the Poisons Act 1972) to homemade explosives above specified concentrations from sale to the general public.

Retailers must also monitor and report transactions of these and a further eight chemicals (Annex 2 of the EU regulation and Part 3 to Schedule 1A to the Poisons Act 1972) for suspicious activity at any concentration great enough that the substance is listed as an ingredient on the label. The new substances would be subject to the monitoring and reporting obligations.

The aim of the policy is to make it easier for authorities to detect attempts to acquire high risk explosives precursors, while still allowing acquisition and use for legitimate purposes.

The Government plans to add aluminium powder, magnesium powder, and magnesium nitrate hexahydrate to Part 3 of Schedule 1A to the Poisons Act 1972 in line with Delegated Regulation (EU) 2017/214, 2017/215, and 2017/216. The Government also plans to remove sulfuric acid² from Part 3 and add it to Part 1 of Schedule 1A. Members of the public wishing to access sulfuric acid above a 15%w/w concentration threshold will be required to apply to the Home Office for an Explosives Precursors and Poisons Licence.

A.2 Groups Affected

Consumers (home users)

Home users will be affected. There are some household or hobby uses for sulfuric acid. Home users will need to apply for a licence or find an alternative product, and demonstrate a legitimate purpose when buying the controlled chemicals. Purchasers of the new chemicals may be subject to additional questioning and possible investigation if their behaviour is deemed to be suspicious.

Public retailers

'Public retailers' refers to companies selling chemicals (sulfuric acid) for household or hobby uses. This would typically include: hardware stores, home improvement stores, garden centres and swimming pool supply companies. Public retailers will need to check licences or cease trading certain products. These retailers are already required to report suspicious transactions, losses and thefts.

Producers, manufacturers, transporters, wholesalers, retailers and professional users

These individuals will need to report suspicious transactions, thefts and significant losses of the new substances and train staff.

¹ On 23 June 2016, the EU referendum took place and the people of the United Kingdom voted to leave the European Union. Until exit negotiations are concluded, the UK remains a full member of the European Union and all the rights and obligations of EU membership remain in force. During this period the Government will continue to negotiate, implement and apply EU legislation.

The general public

The general public will be expected to be safer because of the reduced chance of attacks using homemade explosives.

A.3 Consultation

Within Government

The policy has previously been subject to scrutiny through the House of Lords European Union Sub-Committee Scrutiny Committee and the Commons European Scrutiny Committee. It has also been the subject of correspondence with the Reducing Regulation Cabinet Committee and the National Security Council (Threats, Hazards, Resilience and Contingencies) Sub-Committee. On an official level it is regularly discussed at the cross-Government Hazardous Sites and Substances Board and with the Devolved Administrations.

Public Consultation

Government officials have held detailed discussions with chemical industry, business and retail representatives. To assist with refining this impact assessment, extensive market research was commissioned to look at the impact on affected groups. The Government anticipates broad support from the British public in implementing a change that would prevent the widespread sale of goods which can be used in the illicit manufacture of explosives and corrosive attacks.

B. Rationale

Government intervention is necessary to continue to comply with EU law (for the addition of aluminium and magnesium powders and magnesium nitrate hexahydrate) and to protect the public. By supplying members of the general public with chemicals that can be and have been used to manufacture home-made explosives, retailers increase the likelihood of a successful terrorist attack. Requiring a minimum level of care from businesses dealing with the sale of explosives precursors should increase the likelihood of deterring and/or detecting potential attacks.

The current UK threat from international terrorism as assessed by the Joint Terrorism Analysis Centre (JTAC) is *SEVERE*; this means that an attack is highly likely. It is therefore important that the Government makes changes to prevent chemicals which can and have been used in terrorist attacks from falling into the hands of terrorists.

C. Objectives

The policy objectives are to:

- Prevent terrorists using explosives precursors in attacks.
- Provide a mechanism to alert authorities to terrorist activity.
- Minimise the burdens on industry and legitimate users.

D. Options

Banning or restricting sales of the three new chemicals would be disproportionate to the risk posed at this time. Part 1 of Schedule 1A to the Poisons Act 1972 chemicals are those that have a significant history of effective misuse in Improvised Explosive Devices across Europe. Sulfuric acid

has been used in a number of terrorist attacks in Europe recently even though it has been subject to reporting requirements. Therefore, further restriction is necessary.

Options for the most effective and proportionate measures for restricting retail sales of high risk explosives precursors, like sulfuric acid, were impact assessed in 2014. The consultation and final stage impact assessments considered the costs and benefits of banning sales to members of the public, of requiring registration at point of sale for transactions involving members of the public and of requiring a licence. Licensing was the preferred option because it allows legitimate users to purchase chemicals whilst minimising burdens on retailers and offering authorities an opportunity to check the suitability of the licence applicant and their intended uses. These options have not been revisited for this impact assessment as licensing has been found to be effective at preventing terrorist access to high risk substances, and therefore, the preferred option for further restricting sulfuric acid.

With this in mind, the following options have been considered. Option 2 is in line with the EU regulations whilst option 1 could result in infraction proceedings against the UK.

- **Option 1: Do nothing**
- **Option 2: Fully implement the changes to the substances below:**

Substance	Concentration/size	Measure
Aluminium powder	Above 70% w/w and below 200µm	Add to Part 3 of Schedule 1A of the Poisons Act 1972 (to comply with EU law)
Magnesium powder	Above 70% w/w and below 200µm	Add to Part 3 of Schedule 1A of the Poisons Act 1972 (to comply with EU law)
Magnesium nitrate hexahydrate		Add to Part 3 of Schedule 1A of the Poisons Act 1972 (to comply with EU law)
Sulfuric acid	Above 15% w/w	Move from Part 3 to Part 1 of Schedule 1A of the Poisons Act 1972 (national measure)

E. Appraisal (Costs and Benefits)

GENERAL ASSUMPTIONS & DATA

While efforts have been made to understand the costs and benefits to all affected groups, it is necessary to make some assumptions.

These are as follows:

- The majority of companies that sell any of the new substances already deal in a reportable product.
- The likelihood of making a suspicious transaction or significant loss or theft report is the same as for other types of trade already under obligation.
- Suppliers of sulfuric acid and associated products will already be aware which of their products contain the chemical as it has been subject to reporting requirements since September 2014.
- The appraisal period over which this analysis has been conducted is 10 years, in line with the Home Office standard and Green Book guidance.
- Wage costs have been used as a proxy for time spent rather than to represent additional financial burden to businesses. Wage costs include both direct wage costs as well as non-wage costs, to represent the full marginal cost of labour to businesses.

- The majority of the monetised costs are based on assumptions about the amount of time that might be reasonably taken to perform each activity. The evidence base underlying these assumptions has been strengthened through stakeholder discussions and market research. This market research was conducted independently and aimed to understand the demand and scale of the retail market for the specified explosive precursors (see Annex A).

The Home Office has as far as possible strengthened and confirmed the evidence base through information gathered from consultation.

Number of businesses affected

The affected chemicals are known to have a limited range of uses. The main uses are presented in Table 1 below.

This has informed an estimate of the number of businesses that sell the three chemicals, using ONS data on the number and size of UK local units, sorted by Standard Industrial Classification (SIC) codes. The SIC codes encompass a number of different types of business and assumptions were made as to what proportion of each SIC code would sell the three chemicals. The Home Office is aware that these figures are assumption-based, but consultation provided a sense check.

Research was carried out to gather estimates of the number of retailers of some substances, including sulfuric acid (see Table 2).

Table 1, New chemicals and their uses, 2017.

Substance	Main uses
Aluminium powder	<ul style="list-style-type: none"> • Pyrotechnics • Marine resins • Manufacture of cosmetics, paints, alloys, concrete
Magnesium powder	<ul style="list-style-type: none"> • Pyrotechnics • Manufacture of alloys
Magnesium nitrate hexahydrate	<ul style="list-style-type: none"> • Aquarium plant fertiliser
Sulfuric acid	<ul style="list-style-type: none"> • Drain cleaner • Battery acid refill • Swimming pool cleaner • Manufacture of explosives and fertiliser (industrial)

Consultation with industry and retail experts suggests that there are ready alternatives for the use of sulfuric acid in drain cleaning. Because of this, and the dangerous nature of sulfuric acid, the Government does not intend to issue licences for this purpose, unless they are under exceptional circumstances.

Table 2, Number of businesses, 2017.

Business Type	Lower	Best	Upper
Retailers Sulfuric Acid	16,600	18,500	20,300
Retailers Annex 2 substances	700	3,700	6,800
Wholesalers Annex 2 substances	70	400	700
Producers Annex 2 substances	55	70	85
Pharmacists and Know-Your-Customer (specialist) retailers		30,000	
Total	47,400	52,700	57,900

Figures have been rounded, rounding errors may exist.

COSTS

The activities and the related costs are outlined below.

Transition costs (monetised)

These costs will be incurred in year one.

Costs to Business

E.1 Verifying which products are affected

This refers to the costs associated with businesses needing to check which of their products are affected by the new regulations.

Based on responses to the consultation and assessment of implementation of regulation 98/2013, an estimate of one administration hour per business has been made. It is assumed that producers and specialist suppliers would already be aware of their products and therefore do not incur a cost. Sellers of sulfuric acid and products containing sulfuric acid will already be aware of these products (as it is already a reportable substance) and will therefore also not incur this cost.

There are an estimated 4,100 total retailers and wholesalers of additional Annex 2 substances in the UK. At an estimated average hourly cost of £11.35 per hour³, this results in a total cost of around **£47,000 in the first year**.

E.2 Providing information for prospective buyers on restrictions concerning concentration levels

This refers to costs incurred by retailers of products containing more than 15% w/w sulfuric acid, who will need to inform customers that the goods are now licensed and potentially point them to alternatives if available.

This is assumed to take 30 administration minutes per month for each business that retails sulfuric acid. With an average hourly cost of £11.35 per hour⁴ and approximately 18,500 retailers of sulfuric acid, this is estimated to cost **£1.3 million in the first year**, with negligible costs from year 2 onwards.

The Home Office provides lines for businesses to take when explaining the regulatory changes that affect their products, available on gov.uk.

Transition costs (un-monetised)

Costs to Business

E.3 Labelling affected products

Retailers will need to work with their suppliers to ensure that products containing sulfuric acid above 15% w/w concentration are labelled if they are to be made available to the general public. Based on information from the consultation and a key industry association, as long as manufacturers and formulators are made aware of the requirement in good time before the regulation comes into force, the costs of adding a single line of text to a label would be negligible, and are therefore un-monetised.

³ Hourly wage based on ASHE Median Gross Hourly Wage 2017 for Sales and Customer Service Occupation, Non-Wage uplift based on Eurostat Labour Cost per hour for the Whole Economy (excluding agriculture and public administration)

⁴ Hourly wage based on ASHE Median Gross Hourly Wage 2017 for Sales and Customer Service Occupation, Non-Wage uplift based on Eurostat Labour Cost per hour for the Whole Economy (excluding agriculture and public administration)

Costs to the Public Sector

E.4 Implementation costs

There will be no additional implementation costs associated with the addition of new substances for the police. A dedicated police team already deal with chemical suspicious transaction reporting, and the UK already has fully operational line and a team to deal with chemical related reports. For this reason, this cost remains un-monetised.

Ongoing costs (monetised)

Costs to Business

E.5 Compulsory training and awareness raising of staff members

Retailers of the new chemicals will need to understand and maintain their knowledge about suspicious transactions and significant loss reporting.

Producers, wholesalers, and transporters that already deal in reportable explosive precursors and poisons are expected to have already received training on suspicious transactions and significant loss reporting, and are therefore excluded from this estimate. This assumption has been tested through consultation with retailers.

It is assumed that training will take one hour per store each year⁵ for retailers and wholesalers and distributors who do not already sell reportable explosives precursors and poisons. This subgroup refers specifically to hardware suppliers who sell sulfuric acid over the stated concentration level.

With an estimated 4,900 hardware supplier stores in the UK assumed to sell sulfuric acid (see Annex A) and an estimated average hourly cost of £11.35⁶, the total cost is **£0.1 million per year, at a present value (PV) of about £0.5 million over 10 years.**

E.6 Checking that a business is a business

Information from businesses and associations suggests that producers and wholesalers would already have mechanisms in place to check that they are only dealing with businesses that need the restricted chemicals for the purpose of their trade, business or profession.

Therefore it is retailers that will face the biggest burden as they may sell to professional users (those that use precursors as part of their business activity) and may need to check documents which they may not have done previously. This is estimated to take two minutes per transaction.

Market research suggests that there is a range of annual customers between 1 and 30 per store that supplies sulfuric acid. Expert opinion suggests that the customer base is split roughly evenly, with half being businesses and half being the public.

There are an estimated 18,500 retailers of sulfuric acid and approximately 3,700 retailers of the additional Annex 2 substances. Taking a conservative 15 business customers per retailer annually, with the assumption of 2 minutes per transaction, and an estimated average hourly cost of £11.35⁷, the total cost is **£0.1 million per year at a present value (PV) of £1.1 million over 10 years.**

⁵ This estimate is based on the amount of time for one person to use all of the training materials provided by the Home Office

⁶ Hourly wage based on ASHE Median Gross Hourly Wage 2017 for Sales and Customer Service Occupation, Non-Wage uplift based on Eurostat Labour Cost per hour for the Whole Economy (excluding agriculture and public administration)

⁷ Hourly wage based on ASHE Median Gross Hourly Wage 2017 for Sales and Customer Service Occupation, Non-Wage uplift based on Eurostat Labour Cost per hour for the Whole Economy (excluding agriculture and public administration)

E.7 Processing licences and keeping a record of licensed users

Retailers of products containing sulfuric acid above 15% w/w will need to check the licence against photographic ID for each transaction from the general public and mark the details of the transaction on the back of the licence. Previous consultation suggests that processing licences will take 15 minutes per week per business.

Given the intention to not issue licences for drain cleaners containing high concentrations of sulfuric acid and the fact that swimming pool supply companies already have to check licences, the only new sector that will have to adopt licence checks is the motor vehicle sector, which is limited in number.

There are an estimated 1,200 motor vehicle retailers checking licences. At an estimated average hourly cost of £11.35⁸ and an average of 15 minutes per week, this cost amounts to **£0.2 million in total each year, at a present value (PV) of about £1.5 million over 10 years.**

Costs to the Public Sector

E.8 Licensing costs

Members of the public (that is, non-professional consumers) who wish to continue using sulfuric acid above 15%w/w concentration will have to apply for a precursors licence.

A licensing system was previously set up upon implementation of EU regulation 98/2013.

No additional staff will be needed to manage the addition of sulfuric acid.

To date, there have been **388** applications for EPP licences across the 7 existing Annex 1 substances since September 2014. The licence fee of £39.50 is based on the assumed full cost-recovery of an average 60 mins processing time per application (30 mins Home Office time, 30 mins Police time). Thus the cost of this is expected to balance with the fee income to the public sector, to give a **net cost of zero**.

Any appeals would go through judicial review and thus have an impact on the Criminal Justice System. No appeals have been submitted since September 2014 when the licensing regime came into operation.

Costs to Home Users

E.9 Licence Costs

Members of the public who already hold a licence for another Annex 1 substance will simply need to fill a form in with no additional financial cost to amend this licence. However to be conservative it is assumed all licences will be a new cost to users.

It is expected that only consumers of swimming pool accessories and battery acid refill will be required to purchase licenses for use of above-concentration sulfuric acid. Consultation with industry and retail experts suggests that there are ready alternatives for the use of sulfuric acid in drain cleaning. Because of this, and the dangerous nature of Sulfuric acid, the Government does not intend to issue licences for this purpose, unless they are under exceptional circumstances.

There are an estimated 95 retailers of swimming pool accessories the UK and it is assumed a conservative 15 annual private users per retailer⁹. Furthermore, market research identified that only 3 per cent of motor vehicle parts sell battery acid refill, and that each of these have a much

⁸ Hourly wage based on ASHE Median Gross Hourly Wage 2017 for Sales and Customer Service Occupation, Non-Wage uplift based on Eurostat Labour Cost per hour for the Whole Economy (excluding agriculture and public administration)

⁹ See Section E6 for derivation.

lower annual customer base of one. The Government assumes that there is no substitution away to other substances that fulfil a similar customer need but do not require licences, and therefore this amounts to a total additional 1,500 licenses required, to be renewed every 3 years.

The financial cost per licence is £39.50, however there is an additional cost of effort to the home user of £3 per application to reflect an estimated 30 minutes of time spent to fill out a licence form. Based on this, the licensing requirement will cost home users £42.50 per licence.

With an estimated additional 1,500 additional licence applications for sulfuric acid for renewal on a three-year basis, the total cost is **£0.1 million every 3 years and this represents a present value (PV) of about £0.2 million over 10 years.**

Ongoing costs (un-monetised)

Costs to Business

E.10 Reporting suspicious transactions, thefts or significant losses

Any business that experiences a suspicious transaction, theft or significant loss relating to the new substances must report this to the anti-terrorism hotline. It is not possible to estimate exactly how many suspicious transactions or significant losses will occur.

Such a regime has been in place for reportable explosives precursors since September 2014 and for reportable poisons since May 2015.

There is no expected net effect on sulfuric acid reporting because it is already one of the substances being monitored, and any potential increase in reporting because of increased priority is expected to be outweighed by a decrease in reporting because of fewer transactions taking place. The cost of suspicious transaction reporting to business is expected to be negligible.

HO and EU guidance has been issued that gives clear advice on how to identify and report suspicious transactions. This is based on current business models to ensure the advice provides a practical and cost effective way to achieve requirements. This guidance has already included two of the new substances on a voluntary basis since it was originally issued.

E.11 Internet sales

Online retailers that sell products containing sulfuric acid above 15% w/w concentration will need to ensure that they are selling to businesses or licensed general public users at the recorded address.

Prior to implementation of the regulation in 2014, there were a total of six independent online retailers of sulfuric acid. Recent market research has not identified anything further. It is assumed that costs for this are negligible and therefore un-monetised.

E.12 Deterrence effect of licence

The cost of a licence is below £40, and most home users would not be deterred from purchasing restricted chemicals. (77% of those who responded to a previous consultation question stated that they would continue to purchase at that price.)

Where an alternative does exist, but costs more (for example diluted versions of the same chemical), there may be a potential benefit to business as it is expected that a higher profit margin can be made from these products.

It has been assumed that home users would not be deterred from purchasing restricted chemical at this license fee and therefore this cost is un-monetised.

E.13 Monitoring of compliance and enforcement costs

The expectation is that the substantial majority of businesses and the general public will comply with the regulations from the outset. However, if a business or a member of the general public is found to be non-compliant, action will be taken which could result in criminal prosecution.

If information is received about non-compliance, enforcement officers will be tasked to conduct a test purchase and take action as appropriate. A small percentage of randomly selected retailers and businesses in each area will also be subject to routine test purchasing. Guidance has been prepared to assist enforcers in how to conduct the test purchases to ensure they are conducted ethically and within the bounds of the regulation.

This cost has been assumed to be minimal and is therefore un-monetised.

E.14 Monitoring and maintaining the suspicious transactions, theft and significant loss reporting systems

The Government has consulted the Anti-Terrorism hotline about the potential impacts on resourcing and the increase in number of reports due to the addition of three new substances is not expected to impact on their staffing levels. Some businesses have been reporting suspicious transactions involving the new substances on a voluntary basis already and this has not required additional staffing.

The hotline staff filter calls to be followed up by the police. Without this filtering the legislation might result in a high cost of increased police time following up new leads which might not in fact be useful. New leads as a result of suspicious transaction reports have already led to arrests for explosives related offences and disrupted attack plots. These have included transactions involving the new substances. This demonstrates that the new leads provide an overall benefit to the police due to the increased likelihood that a terrorist plot is disrupted. It is assumed that police officers would run the same level of investigation (that is, using the same number of officers and resources) but now have better information.

E. 15 Suspicious transactions, theft and significant losses

The requirement to report suspicious transactions may lead to some legitimate customers being refused sale or having to deal with the police investigating the reasons behind their transaction. Clear guidance, tailored to the retail sector and mode of sale, has and will continue to be widely disseminated advising retailers about suspicious behaviours. If followed, the advice should not affect the sale and the police are experienced in dealing with such matters sensitively. This cost has therefore not been monetised.

Table 3, Estimated economic costs and NPV for Option 2 (£ million, 2017 prices), 2017.

Category	Description	Annual Cost (£M)	Net Present Value (£M) over 10 years	Assumptions (see para:)
Transition (one-off)	Cost to business - Verifying which products are affected	£0.1m in first year only	- £0.1m	E1
	Cost to business - Providing information for prospective buyers on restrictions concerning concentration levels	£1.3m in first year only	- £1.3m	E2
On-going (per-year)	Cost to business - Training and awareness raising of staff	£0.1m	- £0.5m	E5
	Cost to business - Checking that a business is a business	£0.1m	- £1.1m	E6
	Cost to business - Processing licences and keeping a record of licensed users	£0.2m	- £1.5m	E7
	Cost to home users - Licence costs	£0.1m every three years	- £0.2m	E9
TOTAL			- £4.6m	

BENEFITS

The intended benefit of this policy is to reduce the likelihood or impact of a potential terrorist attack. A terrorist seeking to execute and attack should be disrupted through one of the following mechanisms:

1. They try to obtain one of the three new substances drawing the attention of the police. Earlier investigation means the attack is more likely to be foiled prior to execution.
2. They are deterred from buying the new substances, and instead substitute to a less harmful attack type (for example, using less harmful substances to manufacture a less harmful explosive device).

The monetised costs associated with this policy are therefore very likely to be outweighed by the un-monetised benefits that can result through the prevention of crime and terrorism. This includes acting as a driver for retailers/manufacturers to reformulate, which allows continued home activities whilst removing or reducing the availability of the substances.

Optimism Bias

The monetised costs and benefits are relatively well understood given that the regulations for Annex 1 and Annex 2 substances have been in place for three years and systems are already set up and operational. For this reason, optimism bias was not considered necessary in this analysis.

Sensitivity Analysis

However, there is uncertainty around the total economic impact of this policy as the calculations are based on estimates of number of businesses, as well as predictions around the number of license applications for an Annex 1 substance. The base case uses the most updated information on likely market activity, supported by consultation and market research.

To explore the impact of risk and uncertainty, a number of key assumptions were subjected to sensitivity analysis. The following presents various scenarios for sensitivity analysis and quantifies the impact on the NPV over a 10 year period.

Central estimate: - £4.6 million NPV over 10 years

- Each 10 per cent increase in the estimated number of businesses that retail sulfuric acid results in an additional decrease in the NPV by £0.4 million.
- Using the lower and upper bounds of the estimated number of Annex 2 businesses results in a variation in the NPV to be between - £4.4 million to - £4.8 million.
- Each 10 per cent increase in the number of license applications for sulfuric acid results in an additional decrease in the NPV by £0.02 million.
- **Blended sensitivity:** A scenario which adjusts all these factors at once (increase in number of businesses that retail sulfuric acid by 10 per cent, use of upper bound of Annex 2 businesses and increase in number of license applications by 10 per cent) yields a net present value of - £5.3 million over 10 years.

The sensitivity analysis illustrates that the cost variation in the preferred option as a result of these areas of uncertainty is not so significant as to outweigh the significant benefit of this policy option, in protecting the UK public from any potential attack.

Distributional impact

Some of the costs may fall unevenly on different groups in society. Home and business users of the chemicals may be affected by the cost of false positive reporting. That is the cost of being regarded with suspicion when the individual's intentions are entirely legitimate. This cost may fall more heavily on some groups in society of businesses attempt to profile customers according to prejudices or misconceptions about religion, ethnicity, or other demographic characteristics. The cost of being perceived with suspicion and distrust is difficult to quantify but it is likely to cause distress, anxiety and feelings of isolation and injustice in the victims. Awareness raising products delivered alongside this legislation ensure that businesses are able to spot suspicious behaviours because of unorthodox behaviour or requests of individuals or groups, rather than using demographic prejudices. However, even with such an education programme in place there may still be some costs felt by customers in minority ethnic or faith groups.

The Home Office does not support a policy of profiling by any method.

Better Regulation Policy

To support balanced reporting of overall EU burdens in the Statement of New Regulation, the estimated EANDCB figure (in 2014 prices), is £0.5 million. This is based on transition costs to business of verifying products concerned (£0.1m) and providing information to prospective buyers on new restrictions (£1.3m), as well as ongoing costs of training (£0.1m pa), checking a business is a business (£0.1m) and processing and keeping a record of licensed users (£0.2m per year).

The UK implementation of the regulation does not gold plate, that is, go beyond the minimum requirements of the EU regulation. As in the EU regulation, the GB implementation will only apply to the general public. The EU regulation provides a choice of derogations that allows us to relax restrictions allowing the general public to acquire, possess or use the restricted substance if granted a licence or part registration/part licensing regime.

A non-regulatory approach would not be regarded by the European Court as adequate means of transposing the regulation. The regulation will not be transposed before the transposition dead-line. A statutory Ministerial Review will be written into the regulation before 2 September 2017 when the European Commission will report on implementation and thereafter every five years.

By using the derogation to allow sales to the public in accordance with a licence, the preferred option provides the greatest protection at the lowest cost to businesses.

This relaxation of the default banning option puts UK businesses at an advantage compared to those in other EU Member States who have chosen to ban sales to the general public. For example, bans will apply in the Netherlands, Norway, Denmark and Poland.

UK guidance is based on the guidance produced by the European Commission. The preferred option, to licence, allows the authorities to check the suitability of the individual to acquire, possess and use explosives precursors as allowed by the EU regulation, whilst placing the main burden on Government and the individual.

Small and Micro Business Assessment

Small and micro businesses may be affected by the changes but most already have to comply with requirements of the Poisons Act 1972 (1972 Act) because of their stocks of other scheduled substances. Full consideration has been given to this segment of the market, however, as a policy designed to protect the public from explosive attacks, it would not work if small and micro businesses were exempt. Advice on how to comply with the 1972 Act is tailored to the type of business allowing the impacts on smaller businesses to be proportionate and practical for them to implement.

F. Risks

OPTION 2 – fully implement changes

- The regulation relies on businesses being responsible and reporting suspicious transactions or significant losses. There is a risk that businesses will not take this up or will forget. There is also a risk that businesses will be fearful of reporting a suspicious transaction to the anti-terrorism hotline due to doubt about the credibility of their suspicion. To mitigate this, ongoing awareness raising activities are conducted and disseminated by various means. This should also refresh the aims of the regulation in retailers' minds. In addition, mystery shopping will be conducted on a random basis with aggregated results and best practices fed back to trade associations to serve as an incentive to make sure members of staff are aware of the requirements. The hotline is referred to in advice products as the national contact point in order to remove any barriers relating to calling an anti-terrorism number.
- There is a risk that alternative explosive precursors that are easier to acquire could be used instead and go undetected. This will be mitigated by a continuous review of the chemicals on the annexes (1 and 2).

These risks will be mitigated by raising awareness through the free of charge provision of guidance documents, a short video on suspicious behaviours and e-learning.

Finally, it must be noted that optimism bias has not been applied to our cost estimates, as these are based on known average wages and exact licence prices. Any risk in variation with regard to volumes has been explored above using sensitivity analysis.

G. Enforcement

Enforcement is the responsibility of the Home Office as the licensing authority and the police. When enforcing this policy enforcement bodies need to check compliance. This may be in the form of test purchase exercises where a covert officer attempts to purchase a banned or restricted product without complying with the required conditions. Test purchases may be targeted based on intelligence, for example, reports of the supplier's non-compliance from members of the general public or a small percentage chosen at random based on the number of businesses.

Additionally, when conducting a search of domestic premises, if Annex 1 chemicals are found, the police would be expected to check for a valid licence.

Guidance has been drafted by the Home Office for enforcement agencies. The European Commission has drafted guidance for businesses on: identifying and reporting suspicious transactions, thefts and significant losses and labelling requirements.

The licensing applications and checks are based on existing systems such as those for processing a shotgun or explosives licence and Disclosure and Barring Service checks.

H. Summary and Recommendations

The table below outlines the costs and benefits of the proposed changes.

Table H.1 Costs and Benefits		
Option	Costs	Benefits
2	£4.6m (PV over 10 years)	£0m (PV over 10 years)
		Benefits to society of the reduced risk or impact of a terrorist attack by Improved Explosive Device (IED). (not quantified)

Based on the analysis in sections E and F, the policy objectives and the risk of infraction proceedings of not complying with EU regulation, the preferred option is Option 2 – fully implement the changes. There are a number of aspects that are not quantifiable, such as the benefits, but it is likely that the benefits in reducing the likelihood or impact of a terrorist attack would outweigh the costs of adding the three new substances. It is likely, given the large economic and social costs that arise following a successful terrorist attack, that the low cost of implementing this change will be quickly offset by the benefits of avoiding an attack.

I. Implementation

The Government plans to implement these changes on **02/04/2018** via statutory instrument.

J. Monitoring and Evaluation

The effectiveness of the new regime will be monitored by comparing the number of calls per month to the anti-terrorist hotline relating to suspicious transactions and the number that lead to further investigation and action are available against previous data. The difference will indicate whether the changes made it easier for authorities to detect attempts to purchase high risk explosive precursors.

K. Feedback

In order to accurately assess the impact of the legislation the Government will continue to seek views from those who will be most affected by the policy (retailers and enforcement authorities) through on-going engagement.

This will be achieved by regular stakeholder meetings and monitoring correspondence relating to the policy.

ANNEX A

Our figures have been drawn from market research conducted by an independent research company. This research aimed to understand the demand and scale of the retail market of specified explosive precursors, including sulfuric acid. The specific research questions were:

1. What is the scale of the market for suppliers of specified explosives precursors to the general public?
2. What unit sizes, concentrations and volumes of explosive precursors are sold in the UK each year by different sectors?

Table A.1 Estimated number of business affected (all concentrations) for Annex 1 sulfuric acid

Business type	Lower	Upper
Retailers	677	6,774
Wholesalers	N/A*	
Producers	N/A*	
TOTAL	804	7,561

*Wholesalers and producers were out of scope for the market research. Nevertheless, they were not utilised in any analysis for this impact assessment, so estimation of numbers was not necessary.

Table A.2 Number of retail, wholesale and producer businesses affected for Annex 1 sulfuric acid

Industry suppliers	Total number supplying to the UK public
Hardware Suppliers	4,769
Swimming Pool/ Spa Accessories	93
Marine Suppliers	139
Motor Vehicle Parts/ Accessories	1,216
Convenience Stores	11,222
Garden Supplies	1,053
Total	18,491

ANNEX B

Standard Industrial Classification (SIC) codes from the ONS were used to estimate the number of retailers, wholesalers and producers that would sell the additional Annex 2 chemicals (see B.3).¹⁰ Pharmacies were excluded from this methodology to avoid double counting with the number of recipients of *Know Your Customer*. Assumptions were made as to the scale of Annex 2 use in each category (% of SIC code that sell Annex 2 chemicals), based on Table B.1 below.

Table B.1 Level of precursor use

Level of precursor use	Minimum (%)	Maximum (%)
None	0	0
Low	1	10
Medium	40	60
High	75	95

The SIC codes cover a wide range of businesses and some business types will sell both Annex 1 and 2 chemicals. It has not been possible to entirely separate out Annex 2 businesses alone as some SIC codes cover a wide range of business types and some businesses will sell both.

These figures should be treated with caution as they are based on assumptions on the scale of explosive precursor use in each industry classification.

Table B.2 Estimated number of business affected (all concentrations) for the three additional Annex 2 substances

Business type	Lower	Upper
Retailers	677	6,774
Wholesalers	70	703
Producers	56	84
TOTAL	804	7,561

¹⁰ UK Business: Activity, Size and Location, 2012, Table A3.1 United Kingdom- Number of Local Units in VAT and/or PAYE based enterprises in 2012.

Table B.3 Number of retail, wholesale and producer businesses affected for the three additional Annex 2 substances

SIC codes	Retail, SIC code description	Estimated impact (%)		Estimated No.	
4752	Retail sale of hardware; paints and glass in specialised stores	1	10	88	884
4776	Retail sale of flowers; plants; seeds; fertilisers; pet animals and pet food in specialised stores	1	10	81	815
4778	Other retail sale of new goods in specialised stores	1	10	250	2,504
4791	Retail sale via mail order houses or via Internet	1	10	257	2,572
Total				677	6,774

SIC codes	Wholesale, SIC code description	Estimated impact (%)		Estimated No.	
4612	Agents involved in the sale of fuels; ores; metals and industrial chemicals	1	10	12	125
4661	Wholesale of agricultural machinery; equipment and supplies	1	10	20	198
4672	Wholesale of metals and metal ores	1	10	20	197
4675	Wholesale of chemical products	1	10	18	184
Total				70	703

SIC codes	Producers, SIC code description	Estimated impact (%)		Estimated No.	
2442	Aluminium production	40	60	56	84
Total				56	84