

<p>Title: Transposition of the recast of Directive 93/15/EEC (Directive 2014/28/EU) – Explosives for Civil Use (Civil Uses Directive) - Impact Assessment</p> <p>IA No: HSE0092</p> <p>Lead department or agency: Health and Safety Executive</p> <p>Other departments or agencies: Department for Business, Innovation and Skills</p>	Impact Assessment (IA)
	<p>Date: 21 December 2015</p> <p>Stage: Final</p> <p>Source of intervention: EU</p> <p>Type of measure: Secondary</p> <p>Contact for enquiries: Alison.Wellens@hse.gsi.gov.uk Clark.Rushbrook@hse.gsi.gov.uk</p>
Summary: Intervention and Options	RPC Opinion:

Cost of Preferred (or more likely) Option

Total Net Present Value	Business Net Present Value	Net cost to business per year (EANCB on 2014 prices)	In scope of One-In, Two-Out?	Measure qualifies as
-£0.49m	-£0.48m	£0.05m	No	N/A

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

A number of Directives, including the Civil Uses Directive, have been amended or ‘recast’ to strengthen and modernise market surveillance of products first placed on the market. This measure was adopted and published in the Official Journal of the European Union on 29 March 2014. Under EU law, the UK has a legal obligation to implement the recast of the Civil Uses Directive (Directive 93/15/EEC) into domestic legislation.

What are the policy objectives and the intended effects?

The objective is to meet the UK’s obligation to implement EU Directives and to ensure that the implementation of the changes is clear, coherent and easy to understand, and that it does not place a disproportionate burden on industry, regulators and other stakeholders. Successful transposition of the changes will ensure the continued alignment of GB with other EU Member States providing a consistent approach to regulating the placing on the market of civil use explosives.

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

Only one option is explored in this IA as viable:
 Option 1 - to transpose the Recast Directive by an amending SI to the Explosives Regulations 2014 (ER2014), as this meets the UK obligation to transpose EU Directives in the least burdensome way to business

Options to produce guidance only or to maintain the status quo have not been considered viable, as neither would deliver our obligations under EU law.

Will the policy be reviewed? It will be reviewed. **If applicable, set review date: April 2021**

Does implementation go beyond minimum EU requirements?	No				
Are any of these organisations in scope? If Micros not exempted set out reason in Evidence Base.	Micro Yes	< 20 Yes	Small Yes	Medium Yes	Large Yes
What is the 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, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.

Signed by the responsible Minister

Justin Tomlinson

Date: 8/3/16

Description: Transposition of the recast

FULL ECONOMIC ASSESSMENT

Price Base Year 2015	PV Base Year 2016	Time Period Years 10	Net Cost (Present Value (PV)) (£m)		
			Low: -0.60	High: -0.40	Best Estimate: -0.49

COSTS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	0.2	1	0.02	0.4
High	0.4		0.02	0.6
Best Estimate	0.3		0.02	0.5

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

Manufacturers bear around 85% of the total monetised costs to business, mainly because of changes in requirements for conformity attestation, which will cost around £327k (ten-year present value). This includes the one-off costs of conformity attestation for 'own-use' explosives mixed on-site, which will affect around 28 quarries and mines, and the ongoing costs of accreditation to the notified body that will be passed on to manufacturers in the form of an increase in the charge per approval. The other monetised costs to business are one-off familiarisation costs for manufacturers, importers, and distributors, estimated at around £154k. The costs to government are to the regulator in terms of one-off training costs for inspectors, estimated at around £8k.

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

None. All anticipated costs have been monetised.

BENEFITS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	Nil	1	Nil	Nil
High	Nil		Nil	Nil
Best Estimate	Nil		Nil	Nil

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'

The main benefits are potential improvements of overall safety standards. The equivalence of notified body standards also ensures a level playing field across the EU for manufacturers, and is expected to limit the scope for unsafe products to reach the British market.

Key assumptions/sensitivities/risks

Discount rate (%)

3.5

The costs to industry are sensitive to the number of businesses affected by the Recast. This includes the number of manufacturers, distributors and importers of civil explosives, as well as the number of quarries and mines who mix explosives on-site for their own use, whom it is expected will be brought into scope of conformity attestation. HSE has reviewed the assumptions surrounding these during consultation and discussion with industry and concluded that these assumptions are reasonable and proportionate.

BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:			In scope of OITO?	Measure qualifies as
Costs: 0.1	Benefits: 0	Net: -0.1	No	N/A

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Evidence Base (for summary sheets)

1 Problem under Consideration

1. The EU regulates the placing on the market and supervision of explosives for civil uses (i.e. excluding ammunition, military or pyrotechnic articles) by way of Directive 93/15/EEC, known as the Civil Uses Directive. This is implemented within Great Britain (GB) through the Explosives Regulations 2014 (ER2014).
2. The "New Legislative Framework" (NLF)¹ was adopted in the European Council on 9 July 2008, and published in the Official Journal on 13 August 2008.² The European Commission has, as part of the NLF³, recast this Directive (Directive 2014/28/EU) alongside eight others:
 - Low Voltage Directive: Directive 2014/35/EU
 - Electromagnetic Compatibility Directive: Directive 2014/30/EU
 - ATEX Directive: Directive 2014/34/EU
 - Lifts Directive: Directive 2014/33/EU
 - Simple Pressure Vessels Directive: Directive/29/EU
 - Measuring Instruments Directive: Directive 2014/32/EU
 - Non-automatic Weighing Instruments Directive: Directive 2014/31/EU
 - Pyrotechnic Articles Directive: Directive 2013/29/EU (The Pyrotechnic Articles Directive) was adopted early and will come into force summer 2015).
3. The Recast Directive 2014/28/EU replaces the Civil Uses Directive 93/15/EEC, which entered into force on 1 December 1993. The Placing on the Market and Supervision of Transfers of Explosives Regulations 1993 (POMSTER) implemented this Directive in GB. POMSTER has since been revoked and those provisions incorporated into ER2014⁴, which came into force on 1 October 2014. ER2014 consolidated existing explosives legislation, the main elements of which were:
 - Explosives Act 1875 (EA)

¹ Regulation (EC) No 765/2008 of the European Parliament and of the Council of 9 July 2008 setting out the requirements for accreditation and market surveillance relating to the marketing of products and repealing Regulation (EEC) No 339/93;

Decision No 768/2008/EC of the European Parliament and of the Council of 9 July 2008 on a common framework for the marketing of products, and repealing Council Decision 93/465/EEC;

Regulation (EC) No 764/2008 of the European Parliament and of the Council of 9 July 2008 laying down procedures relating to the application of certain national technical rules to products lawfully marketed in another Member State and repealing Decision No 3052/95/EC.

² <http://eur-lex.europa.eu/legal-content/en/ALL/?uri=OJ:L:2008:218:TOC>

³ New Legislative Framework http://ec.europa.eu/enterprise/policies/single-market-goods/internal-market-for-products/new-legislative-framework/index_en.htm

⁴ The Explosives Regulations 2014 <http://www.legislation.gov.uk/uksi/2014/1638/made>

- Control of Explosives Regulations 1991 (COER)
 - Placing on the Market and Supervision of Transfers of Explosives Regulations 1993 (POMSTER)
 - Marking of Plastic Explosives for Detection Regulations 1996
 - Manufacture and Storage of Explosives Regulations 2005 (MSER)
 - Identification and Traceability of Explosives Regulations 2013 (ITOER)
4. The Directive also repeals Directive 2004/57/EC, which provided indicative information on the identification of pyrotechnic articles and ammunition.
 5. The aim of the recast of these Directives is to strengthen and modernise the conditions for placing a wide range of industrial products onto the European market. Government intervention is required to amend ER2014 to fully transpose the Directive into GB law by 20 April 2016. The Minister of Justice, Northern Ireland, will in due course consult on equivalent changes to The Placing on the Market and Supervision of Transfers of Explosives (Northern Ireland) Regulations 1993.
 6. Implementation of the Pyrotechnic Directive is assessed in another Impact Assessment (IA) prepared by the Department for Business, Innovation and Skills (BIS).⁵ BIS is also assessing the other seven Directives together in an IA.⁶
 7. Civil use explosives are those explosives which have been or would be classified in accordance with the United Nations Recommendations as falling within Class 1.⁷ They do not include:
 - i. Ammunition (which is regulated in GB by way of the Firearms Acts 1968 to 1997, a non-exhaustive list of which can be found in Annex 1 of the Directive)⁸;
 - ii. Any explosive which it is shown is intended for lawful use by the armed forces or the police of any country;
 - iii. A pyrotechnic article, such as fireworks.
 8. With regards to the Civil Uses Directive, the transposition will mean some amendments to the existing regime for anyone who places an explosive within scope on the EU market for the first time; and for ongoing market surveillance thereafter. The civil use explosives within the scope of the Directive are used in activities such as blasting at mines and quarries, or in offshore work.

⁵ <http://www.legislation.gov.uk/uksi/2015/1553/impacts>

⁶ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/450592/BIS-15-469-IA-alignment-of-nine-EU-single-market-directives-with-the-new-legislative-framework.pdf

⁷ 'Class 1' means Class 1 in respect of explosives or the classification of dangerous goods as set out by the United Nations Recommendations
<http://www.unece.org/fileadmin/DAM/trans/danger/publi/manual/Rev5/English/ST-SG-AC10-11-Rev5-EN.pdf>

⁸ <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1449477819655&uri=CELEX:32014L0028>

9. The main purpose of the Recast of these nine Directives (as listed in paragraph 2) is to make legislation on the Single Market for Goods clearer, more consistent and more effective. It is not intended to change the technical essential requirements of EU product legislation, but instead build on the existing systems to reinforce the application and enforcement of legislation. The NLF is intended to make legislation consistent so that similar provisions have consistent text. The key changes relate to a strengthening of the legal obligations on manufacturers, distributors and importers involved in placing civil use explosives on the single market. There is also a strengthening of the legal obligations on notified bodies who conformity assess products so that a CE mark can be applied. The UK currently has one Explosives Notified Body (ENB), the Health and Safety Laboratory (HSL). Although HSL is part of HSE, the ENB itself is separate and funds itself through charging industry for its work.

10. In the NLF, the European Council states that:

“[They] believe that a significant number of products on the market do not fulfil the requirements set out by the Directives. Some actors simply affix the CE marking to their products although these products do not fulfil the conditions for being CE marked. Importers and distributors do not all carry out the necessary verifications to ensure that they are only supplying compliant products. Member States are also imposing different obligations on importers and distributors when it comes to ensuring that products meet the applicable requirements. Furthermore, the actions that national authorities are taking vis-à-vis non-compliant products (e.g. prohibitions of marketing, withdrawals, etc.) sometimes differ from one Member State to another.”

11. The Directive looks to remove this inconsistency of compliance across Member States, and strengthens obligations on manufacturers, importers and distributors.

12. Conformity of civil use explosives with the essential safety requirements contained in the Directive is considered as part of the conformity assessment process carried out by the UK's ENB on products already in scope of the Directive's requirements. HSE's market surveillance programme is risk-based and intelligence led. On this basis, it has primarily focused on pyrotechnics to date. To this end, it is difficult to confirm the rate of compliance by using HSE enforcement data as a primary source; however, we are confident that we have gathered enough information on current compliance via engagement with the Inspectorate within HSE, with industry and trade bodies to adequately assess the impact of the changes under the Recast.

13. BIS lead policy for the majority of Directives in the NLF package. HSE leads transposition for Great Britain on Civil Use Explosives (with NI bringing in equivalent arrangements to complete UK transposition). BIS

and HSE have worked to coordinate delivery of the package where possible. In light of this, BIS held a joint consultation with HSE on all eight Directives in the NLF in August 2015.⁹ This included questions relating to terminology, enforcement, penalties for non-compliance, and the role of notified bodies.

14. As the Civil Uses Directive concerns the regulation of explosives within HSE's remit in Great Britain, it is the responsibility of HSE to implement it in GB, and to consult on the proposed implementation. Therefore, rather than wholly rely on the BIS consultation, HSE opted to additionally consult on technical matters within the recast (and not included in the wider NLF consultation) by way of a working group representing the civil use explosives industry (discussed in Section 6).

2 Key Changes

15. The key changes in the Regulations will have an impact on the economic operators (manufacturers (and their authorised representatives), importers, and distributors); and on the ENB; and to HSE.
16. Manufacturers will see changes in the conformity attestation process, and changes in what details manufacturers must attach to explosives. These changes aim to reinforce existing safety standards. The Directive also allows manufacturers to appoint 'authorised representatives' by written mandate, enabling a person to act on their behalf when placing products on the European market.
17. All economic operators will now also be under the obligation to recall or withdraw products from the market if they pose a risk.
18. Under the Recast, notified bodies will have to be accredited and continuously assessed.
19. The Government would see the extension to HSE inspectors of powers under the Regulation on Accreditation and Market Surveillance (RAMS), so that they are able to recall products.
20. The Recast Civil Use Explosives Directive also introduces an explicit requirement that civil use explosives placed on the market by manufacturers *or used for their own purposes* must be conformity-assessed. This means that on-site manufacturing of civil explosives for blasting purposes (e.g. those delivered by blasting service providers) will now need to undergo conformity assessment and be CE marked. This already happens in most cases and the Recast Working Group confirmed that there would be no additional duties involved here.

⁹ Pyrotechnics was subject to its own consultation.

21. It is also our understanding that the on-site mixing of explosives, for example of Ammonium Nitrate – Fuel Oil (ANFO), by a quarry or mine for its own use would also be brought into scope, and thus require a CE mark.

3 Rationale for intervention

22. The Government's EU obligations do not allow a non-legislative approach to be taken in this instance and the rationale for the transposition approach takes full account of the Government's Guiding Principles for EU Legislation. The key focus is to ensure that economic operators operating within the UK are not disadvantaged within the European Market by unnecessary burdens placed upon them. The Government's preferred approach is to use 'copy-out' for transposition where possible. We do not intend to 'gold plate' any of the Directive's minimum requirements and will incorporate the changes into existing legislation, ER2014. Where necessary, we will elaborate some of the Directive's requirements by way of guidance to ensure that they are clear to industry and to maintain consistency with the current regulations and thereby ensure that there are no unnecessary costs. HSE provided support to the BIS-led negotiations on the Recast Directive, to ensure that the impact on GB business was minimised where possible.

4 Policy Objectives

23. The UK policy objectives are to fully transpose the Recast Directive requirements into domestic legislation by 20 April 2016 in a way that:
- minimises the impact of any changes on the explosives industry and UK interests;
 - embeds the new requirements so that they further enhance GB's current explosives regulatory regime;
 - is open and transparent and ensures consistency with current regulations;
 - improves the mechanism for the control over the supply of non-compliant products to consumers.
24. Successful transposition of the changes will enable GB to continue to align with other EU Member States, providing a consistent approach to regulating products placed on the market.

5 Options considered

25. There is only one option explored in this impact assessment, as it is the only viable option.
26. **Option 1:** To transpose the Directive into GB law by an amending Statutory Instrument (SI) to ER2014. Failure to implement in law would be incompatible with the UK's treaty obligations under EU law and would

open up the UK to infraction proceedings. HSE propose to amend the ER2014 to ensure the Directive is fully transposed by 20 April 2016. The Directive will be transposed in the form of copy-out in line with UK Government policy.

27. Where some requirements under the current Directive are implemented under the ER2014, these will be replaced with new and expanded provisions. New duties will also be added.
28. A do nothing option has not been considered as a viable option, as it would not deliver the GB's obligations under EU law. However, it constitutes the notional baseline against which we compare the costs and benefits of Option 1.
29. An option to produce guidance only has not been considered as a viable option as it would also not deliver the obligations under EU law.

6 Research undertaken to inform the IA

6.1 Interviews

30. HSE economists conducted a series of interviews with stakeholders to estimate the costs of implementation to inform the impact assessment.
31. We initially interviewed five manufacturers, a distributor, and the ENB, during December 2014 and January 2015. The interviews focused on the impact on manufacturers; this was considered a proportionate approach as the majority of the changes under the Recast apply to manufacturers of explosives. The five manufacturers interviewed represent just fewer than half of the manufacturers of civil use explosives in the UK (see Table 1), and they also have roles as importers and distributors, and were therefore able to provide evidence of the likely impact on these operators.
32. The interviews provided the primary evidence for the assumptions used in the consultation stage IA and formed the basis for further research undertaken during the consultation through a series of Recast Working Group meetings hosted by HSE and containing a range of industry representatives.
33. We also used the interviews as an opportunity to ask about expected time spent on familiarisation. This was possible because the same industry group has recently had to familiarise themselves with ER2014. We first asked them to recall the time spent on familiarisation with ER2014 (in terms of time spent reading the regulations, understanding their implications and translating them into company policy). Then we asked for their expectations on how much time they would spend familiarising with changes in the Recast, based on the scale of changes in the Recast, compared to ER2014.

6.2 Recast Working Group

34. The second phase of research sought to estimate the costs to industry of the changes under the Recast Directive via a series of Recast Working Groups (discussed below). An initial research group was held in July 2015 with an industry group of representatives from several companies to go through a pre-prepared question set (cost estimates included here were based on responses from the telephone interviews discussed in paragraph 31 above). The members of the group were selected to ensure that it was representative and captured a wide range of economic operators and stakeholders. The aim of the initial meeting was to reduce measurement error by ensuring that members responded to the question set based on a common understanding of what should be included and excluded, and clarifying what constituted 'good' and 'bad' evidence for costs. Based on the initial discussion with the group, the question set was refined to clarify some issues and cover additional areas raised by the group. This was then sent to participants to complete and the results were collated before the second research group.
35. The second research group was held in October 2015 with the same participants to provide an opportunity for the representatives to challenge each other's results, correct any errors and misunderstandings, and reach a consensus that allowed ranged costs to be estimated. One participant who provided responses was unable to attend the second meeting; their responses, where applicable, were validated by the rest of the Working Group.
36. The issue of bringing into scope of own use and on-site mixing was identified through the Recast Working Group. The potential impact of this activity coming within scope has been nominally discussed by the UK's ENB in terms of considering a suitable form of conformity assessment and a potential cost. We have also discussed this with representatives from industry to help identify the number of companies that might be affected, and what they will have to do to comply. These discussions form the basis of the potential costs described in paragraphs 72 – 80.

6.3 Public Consultation

37. As discussed in paragraph 13, BIS has the policy lead in the UK for implementing the majority of Directives under the NLF and HSE has the policy lead for the Civil Use Explosives Directive in Great Britain. In light of this, BIS held a joint consultation with HSE on eight of the recast Directives in August 2015.¹⁰ HSE provided input to BIS in relation to the questions regarding Civil Use Explosives .
38. The public consultation was published on the BIS website. Links to the public consultation were provided on HSE's website with regards to the Civil Use Explosives Directive. The consultation ran for eight weeks, from 4 August to 29 September 2015 and, during this time, 27 responses were

¹⁰ The Pyrotechnic Articles Directive was subject to a separate consultation.

received across the whole NLF package. Of these responses, six applied to civil use explosives (three of these related explicitly to civil use explosives and these were from participants in the Recast Working Group so their responses had already been considered; and the remaining three related to all the Directives in the NLF).

39. HSE received 154 visitors to the HSE consultation page link over the consultation period.

7 General Assumptions

7.1 Cost of Time

40. We assume a working week of 37.5 hours with 7.5 hours in a working day.¹¹

41. The following analysis costs the time of workers based on the Full Economic Cost (FEC) model. That is, we assume that the cost to an organisation of any activity carried out because of the transposition of the Recast Directive will be the value of any lost productive output of that time, and that the value of this lost output is equivalent to the cost to the firm of hiring that worker. The rationale is that a firm hires workers up until the point at which the cost of doing so (i.e. the wages plus various non-wage costs that they pay on employed labour) is equal to the value the firm receives for the output of the additional worker.

42. Feedback from the initial interviews with manufacturers and distributors suggested that the FEC of time of a compliance/functional manager was around £100 per hour. This estimate was validated by participants during the Recast Working Group as part of the research process. Industry also confirmed that this FEC was appropriate across all economic operators. Accordingly, an FEC of £100 per hour is used for all subsequent cost of time calculations for business.

43. We obtained the full economic cost of an HSE inspector from HSE's Ready Reckoner. It is estimated at £557 per day. Assuming 7.4 hours in a working day, this is equivalent to £75 per hour. This value is also used when costing the time of staff at the HSL.

7.2 Time Horizon, Discounting and Rounding

44. We assume an appraisal period of 10 years, applying a discount rate of 3.5% per annum, consistent with the Green Book.¹²

¹¹ HSE's Global Ready Reckoner, used to estimate the cost of time of HSE/HSL staff, assumes 7.4 hours in a working day.

¹²

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/220541/green_book_complete.pdf

45. We assume that one-off costs and cost savings are borne in the first year of the appraisal period (Year 1, which is 2016, i.e. the year of implementation). We also assume that on-going costs and cost savings are borne each year from Year 1 to Year 10, unless otherwise stated.

46. Please note that many of the cost estimates presented in the following analysis have been rounded. As such, some totals and tables may not appear to sum.

47. All figures are in 2015 prices, unless stated otherwise.

7.3 Size of the explosives sector

48. The impacts discussed in this IA will be borne by:

- manufacturers of civil use explosives;
- importers of civil use explosives onto the EU market
- distributors of civil use explosives (any person in the supply chain, other than the manufacturer or importer, who makes explosives available on the EU market);
- the ENB which assesses the conformity of civil use explosives, and;
- the regulator (HSE).

49. The estimated numbers of the economic operators in the UK are indicated in Table 1.

Table 1: Estimated number of economic operators within the UK

Operator	Number within the UK
Manufacturers	13
Importers	15 (10)
Distributors	30 (25)

Note: Numbers in parentheses represent the fact that at least five explosives manufacturers within the UK are also importers and distributors of explosives; thus this figure has been deducted from the total number of importers/distributors to avoid double-counting.

50. We calculated the numbers of distributors based on the total number of EU distributors estimated in the EU Impact Assessment for the Recast.¹³ In the EU there are an estimated 500 distributors of civil use explosives. We used Eurostat Prodcom data on the production of explosives and found that in 2012 around 6% of the civil use explosives sold in the EU were sold in the UK. We used this proportion to estimate the number of distributors and dealers in the UK. According to the EU IA, most of the distributors are small or medium size businesses.

¹³ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=SEC:2011:1376:FIN:EN:PDF>, page 60

51. We obtained information on the numbers of importers from the validation stage IA on ITOER 2013, which was based on HSE's knowledge of the sector.¹⁴
52. We obtained the numbers for manufacturers from the HSE licencing team, as HSE manages the licencing of manufacturers.¹⁵ In GB, manufacturers tend to be small or medium size businesses. HSE economists also undertook supplementary analysis of data from the Interdepartmental Business Register (IDBR), which provides information on the number of enterprises by standard industrial classification (SIC) code, to validate the estimates from the HSE licensing team. The results of this analysis broadly support the initial estimate of 13 manufacturers derived from licensing data.¹⁶
53. The above estimates of the number of manufacturers, distributors and importers affected by the Directive presented in Table 1 were validated by industry as part of the Recast Working Group.
54. We are aware that a number of explosives companies carry out a range of economic operations as defined under the Recast Directive. Feedback from the industry group suggested that there are at least five companies in the explosives sector that have all three sets of duties as a manufacturer, importer and distributor. Accordingly, when estimating the costs to importers and distributors, we have subtracted five from the total number of importers and distributors presented in Table 1 to avoid any double-counting. The actual numbers of importers/distributors used for cost calculations appear in Table 1 in parentheses. There may also be some importers of civil explosives that also have functions as a distributor; however, we have not been able to obtain information on this. Accordingly, the figures may be an overestimate of the number of importers/distributors. However, this is deemed a proportionate assumption.
55. The analysis assumes that the number of operators within the UK will remain the same after 20 April 2016, and for the full ten-year appraisal period. It also assumes that the number of products manufacturers seek to conformity-attest per year will remain constant. During consultation with industry and the working groups, we tried to obtain information on the likely growth (or shrinkage) of the explosives sector over the appraisal period. However, group members were unable to provide us with a definite assessment: some pointed to factors that could lead to sector growth and

¹⁴ http://www.legislation.gov.uk/ukia/2013/1129/pdfs/ukia_20131129_en.pdf

¹⁵ Do note that currently duty holders are required to hold a licence/certificate to acquire and keep, manufacture, store and transfer explosives, though this does depend on the types and quantity of explosives under consideration. The licencing activity is undertaken by a range of bodies, including the HSE, Police Authorities in England and Wales, the Office for Nuclear Regulation (ONR), and Local Authorities.

¹⁶ SIC code 20510 covers the manufacture of explosives, and the latest data suggests there are currently 15 GB manufacturers of explosives. However, SIC code 20510 also includes manufacturers of matches, who would not be affected by changes under the Recast, and so is likely to be an overestimate of the number of manufacturers of civil use explosives.

other to factors that could lead to sector shrinkage. As such, we recognise that this is a simplifying assumption, but believe it is a sensible and proportionate one.

56. The estimates of the numbers of manufacturers presented in Table 1 do not include the numbers of quarries or open cast mines which conduct on-site mixing for their own use, who would also be brought into scope of conformity attestation requirements under the Recast, as described in paragraph 20.
57. Engagement with representatives from the quarries and mines sector suggest that around 80% of all blasted rock in the UK is blasted by the largest 5 companies, with the remaining 20% done by 20 - 25 smaller companies, comprising typically individual quarries and sites. However, the conformity assessment process will be much simpler for on-site explosives, and hence the cost associated with conformity assessment is likely to be much lower for this type of explosives. This is explored further in Section 8.1.1.

8 Analysis of costs and benefits

8.1 Costs to business

8.1.1 Manufacturers

58. As shown in Table 1, the Recast will affect around 13 manufacturers of explosives.
59. The full economic cost of time (FEC) for production or compliance managers, as estimated by the industry research group, was around £100 per hour, as explained in paragraph 41. It is the FEC used for manufacturers in this IA.
60. Changes in the Recast Directive that would affect manufacturers are changes in the conformity attestation procedures, in packaging and safety information requirements, and risk procedures. There would also be familiarisation costs.
61. Although specific duties for record keeping may impose a cost in the other Directives in the NLF (BIS is currently assessing these in a separate IA), they do not pose an additional cost in the explosives sector, as the requirement in the Recast to keep records for 10 years is a pre-existing requirement for explosives under existing legislation. This also applies to other economic operators. The Recast Working Group confirmed that there would be no additional costs associated with record keeping under the Recast.

Conformity Attestation – Providing Additional Information

62. Manufacturers must ensure that each explosive is examined and appropriate tests are carried out in order to verify its conformity with the relevant requirements set out in the Directive. There are a number of tests available, but the requirements for all but one have not changed; the Module B test (for EC type examination) has changed slightly.
63. Under the current Directive, the assessment of the conformity of the explosives under Module B (EC type examination) is determined in the following way: the manufacturer will test their explosive; they will then submit technical documents including test results to an ENB of their choice. The manufacturer must also make a sample available to the ENB if required for carrying out the test programme and agree with the ENB where the testing will take place.
64. However, under the Recast, the manufacturer will *also* have to provide documentation that includes adequate analysis of the risks; details of the harmonised or technical standards used; and, where these have not been applied, reasons why not and details of solutions adopted to meet the essential safety requirements. The documentation must also include details of all tests carried out by the appropriate laboratory of the manufacturer or by another testing laboratory on its behalf under their responsibility. The manufacturer must draw up a Declaration of Conformity and affix the CE marking (once an explosive has been successfully conformity attested by the NB).¹⁷
65. The consultation stage IA included an estimate of on-going costs to industry associated with changes in conformity attestation under the Directive. These additional annual costs were based on responses to initial interviews held with explosives manufacturers and related to anticipated additional time spent per product assessment under Module B. This was estimated to be around £126k (ten-year net present value).
66. As part of consultation with industry, we also asked the research group to consider the impact of slight changes to Module B under the Recast. At the Recast Working Group, the HSE project team spent time outlining in more detail the exact changes that would be required for Module B approval under the new Directive in order to provide industry with a clearer picture of the nature and scale of changes. Given this, the industry group came to the conclusion that they would not need to spend any additional time on conformity attestation to comply with the Recast Directive as they already provide all relevant information, nor would they have to test any additional products because of the changes. Feedback from the ENB, who suggested that the conformity attestation procedure has not changed significantly under the Recast, and thus businesses would not need to do anything differently, supported this.

¹⁷ For more details on the conformity assessment procedures, please refer to Annex iii of the Recast Directive.

Conformity Attestation – Passing the Costs of Accreditation to Industry

67. Under the Recast, notified bodies will incur costs associated with accreditation. Discussions with the UK's ENB suggest that they will pass all of these increased costs on to manufacturers of explosives through an increase in the fees charged for conformity assessment.
68. In order to attain accreditation as a notified body for explosives, HSL would need to be approved by the United Kingdom Accreditation Service, UKAS. HSL is currently going through the accreditation process. HSL stated that the likely cost of attaining and maintaining accreditation would represent a 10% increase to the current running costs of the ENB, which are currently £200k per annum. Accordingly, manufacturers are likely to see an increase in annual costs of around £20k associated with renotification¹⁸ passed through to them via higher fees charged for conformity attestation. In accordance with the Better Regulation Framework Manual¹⁹ (paragraph 1.9.34 vii.), these represent a direct cost to business as they result in an increase in fees charged to manufacturers as a result of an expansion in regulatory activity, and are thus included in the Equivalent Annual Net Cost to Business (EANCB) calculation. As the expansion of regulatory activity is mandated by the recast Directive, this direct cost to business is out of scope of OITO. Moving forward, any future increases will be determined by factors such as location of the site for any assessment visits and also any changes in the volume of business received by ENB or their Pyrotechnics Notified Body (PNB) as some operating costs are shared across both business areas.
69. This increase includes the costs of annual inspection visits by UKAS (for which HSL would be charged around £10k per year). Alongside these costs, there will also be additional HSL staff resource required to prepare for and engage with the process. This is equivalent to three members of staff spending around 44 hours per annum each engaging with the process, or 133 hours in total, at a full economic cost of £75 per hour.
70. Therefore, the increased running costs to the ENB associated with renotification under the Recast will lead to an increase in annual costs spread across all manufacturers of up to £20k, or £172k ten-year net present value (NPV).²⁰
71. HSL is working to identify where any processes can be streamlined to minimise the scale of any cost increase to business, and it is likely that these costs represent an upper limit.

¹⁸ 'Renotification' in this instance refers to the costs incurred by HSL by applying for permission each year to remain the Explosives Notified Body for GB.

¹⁹ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/468831/bis-13-1038-Better-regulation-framework-manual.pdf

²⁰ Please note, that these costs will not affect the costs per conformity assessment for the on-site mixing of explosives for own use, such as ANFO, by quarries and mines. The costs will be spread across the 13 manufacturers noted in Table 1.

‘Own use’

72. As set out in paragraph 20, the Civil Use Explosives Directive introduces an explicit requirement that civil use explosives placed on the market by manufacturers *or used for their own purposes* must be CE marked. This means that on-site manufacturing of civil explosives for blasting purposes (e.g. those delivered by blasting service providers) will now need to undergo conformity assessment and be CE marked. The Recast Working Group confirmed that all blasting service providers already CE mark their products. As such, there is no cost increase associated with the requirement.
73. It is our understanding that the on-site mixing of explosives by a quarry or mine for its own use would also require conformity assessment. The cost of conformity assessment of on-site mixing of, for example, ANFO (the most common on-site mixing) would be a one-off cost per affected company. Additional costs could be incurred if the nature or range of the ANFO mixing were ever to change over time; however based on discussion with industry we understand this is unlikely. On this basis, HSL have indicated that they would charge around £3.5k per company, which could rise to around £5k depending on travel costs for the site assessment visit, and that this represents a one-off cost per company and would cover all sites where mixing took place. We understand from inspection information and discussion with industry that there are approximately 25–30 companies likely to be affected by the proposals. Five of these are large companies, while the remainder are small companies.
74. During discussions with representatives from the quarries and blasting sectors, we also asked what costs the businesses would incur in terms of staff time and resources required when applying for and engaging with the conformity assessment process. Feedback from industry was that in fact much of the required information, i.e. product specifications of the materials used (e.g. Ammonium Nitrate) and calibration data, was already required under existing legislation, and so there would be minimal staff time required to collect and present information to the ENB during the test visit.
75. A conservative estimate of one hour per business associated with collating relevant information and preparing for the ENB visit was agreed with representatives from the quarries and blasting sectors. At a full economic cost of £100 per hour, this gives a total cost of staff time across all 25-30 quarries of between £2.5k and £3k, with a best estimate of £2.8k.
76. Accordingly, the total one off costs of bringing into scope civil use explosives intended for own use are between £90k and £153k, with a best estimate of £120k.²¹

²¹ Please note, this range for one-off costs to companies associated with conformity assessment of ‘own use’ mixes is based on multiplying the upper limit for the average number

77. The ENB has also indicated that they would carry out a further visit to each company five years after the initial assessment to demonstrate continued compliance. This would involve two members of staff from the ENB (HSL) travelling to the site and reviewing records to identify whether the product in its intended use still meets requirements. HSL would recover the costs of each visit from each company, and therefore these represent a direct cost to business.
78. The average length of each visit is likely to be around one day for each individual (including travel time). At a full economic cost of around £557 per day, plus approximately £400 in travel and subsistence, this gives an average cost of a 5 year assurance visit of around £1.5k per company. Across the 25 – 30 quarries and mines that mix explosives on-site, this gives a total cost of between £38k and £45k, with a best estimate of around £42k. These costs would be incurred in Year 6 of the appraisal period. This gives a present value cost of between around £32k and £38k, with a best estimate of around £35k.
79. No further costs are envisaged with this activity coming within the scope of conformity assessment, as industry suggest that the activity is likely to remain unchanged from how it has previously been carried out. Many of the other duties associated with manufacturers under the NLF, such as obligations relating to packaging and translation requirements for products being imported or distributed, are unlikely to be relevant.
80. The total costs (over the ten year appraisal period) of bringing into scope explosives mixed on-site intended for own use (such as ANFO) are therefore estimated at between £122k and £191k, with a best estimate of around £155k.

Packaging

81. The Directive 2008/43/EC relating to tracking and tracing of explosives for civil uses specifies that as soon as is practicable after manufacture and before explosives leave the site, manufacturers must ensure that all explosives within scope are marked in a specific way (there are some exclusions from this). They must be marked with:
- the name of the manufacturer;
 - the two letters identifying the European Economic Area state (place of production or import onto the market);
 - the three digits identifying the site of manufacture;
 - the unique product code;

of companies that mix explosives on-site (i.e.30) by the upper limit of the range suggested for the likely cost per CE assessment (i.e. £5k). In reality, it is extremely unlikely that both of these outcomes would occur simultaneously. Accordingly, this estimate represents an upper limit of the likely increase in costs to quarries associated with the conformity attestation of 'own use' explosives under the Recast Directive. The same is true of the lower bound.

- logistical information designed by the manufacturer, and;
- a part which can be read electronically in barcode or matrix code format, or both, which relates directly to the alphanumeric identification code.

82. For those manufacturers of explosives excluded from the scope of the traceability requirements under Directive 2008/43/EC, the Recast requires them to include their name, registered trade name or trademark, and the address at which they can be contacted on the product, or where that is not possible, on its packaging, or in a document accompanying the product. The address must indicate a single point at which the manufacturer can be contacted.

83. The interviews and Recast Working Group indicated that in fact most companies would not incur any additional costs because of changes in the Recast around packaging. This is because the manufacturers already provide all required details. Therefore, no costs have been estimated.

Translation of Safety Information

84. The Recast Directive requires manufacturers of civil use explosives to provide instructions in a language easily understood by end-users and consumers, thus affecting those businesses that transfer or export their explosives to EU countries where English is not considered 'easily understood'.

85. Compliance with this requirement would involve translating safety information for both new and existing products that do not already have translated information. An average cost per technical translation (per product) was agreed by the Working Group as being between £150 and £500, with a best estimate of around £325.

86. Engagement with HSE sector experts, however, indicates that the duty to translate safety information into a language easily understood by end-users and consumers in the destination country is not in fact an additional requirement, as this obligation existed under the current standards.

Procedure when products pose a risk

87. The Recast requires manufacturers to inform market surveillance authorities where their products pose a risk, and to withdraw products from the market if the market surveillance authorities request them to do so.²²

88. In terms of the requirement to inform authorities when products pose a risk, interviews with manufacturers revealed that no procedures would have to change in light of changes in the recast. This is classified as

²² The risk referred to is the risk of harm to health and safety, property or the environment prior to the intended use of the explosive which could arise from lawful and predictable human behaviour.

business as usual and no costs would be necessary to implement or set in place any additional procedures.

89. However, as the requirement to notify HSE is a new legal requirement, manufacturers would bear a cost of notification and following up any subsequent action requested by the Market Surveillance Authority. The costs would be the time cost of the phone call made to HSE for notification, and any costs that may develop from that around checking products and any subsequent action.
90. In line with HSE sector knowledge, participants at the Recast Working Group suggested that the likelihood that products pose a high enough risk to require recall or withdrawal is low. Furthermore, if a product were to pose such a risk, manufacturers suggested that they would withdraw it voluntarily in order to avoid any negative reputational impacts associated with a product recall. In addition, HSE would also request information on the recall anyway. Therefore, in practice, this new requirement would not lead to any additional recalls. Accordingly, no costs have been estimated.

Familiarisation

91. Based on information obtained from initial interviews with business, the consultation stage IA estimated one-off familiarisation costs per manufacturer, based on a compliance manager spending between one and two days reading and understanding changes and translating these into company policy, with a best estimate of 1.5 days.
92. Based on 13 firms, an FEC of £100 per hour and 7.5 hours in a working day, this gives an estimated total one-off cost of between around £9.8k and £19.5k, with a best estimate of around £14.6k.
93. Feedback from the Recast Working Group, however, suggested that this initial estimate of the time spent on familiarisation for manufacturers was too low. The industry group suggested that at least five manufacturers also have duties as importers/distributors, and that they would familiarise themselves with their changes under all at the same time. Stakeholders suggested that this would involve between two and five people spending between two and three days reading and understanding changes in the Directive.
94. As the majority of changes relate to manufacturers, this range is also used to estimate one-off familiarisation costs to those companies that are solely manufacturers (i.e. have no additional duties as an importer/distributor). Therefore, the familiarisation costs to manufacturers estimated here may be an overestimate of the total costs, however this approach was considered proportionate by the Working Group and is unlikely to affect the overall scale of costs.

95. Based on 13 manufacturers, an FEC of £100 per hour and 7.5 hours in a working day, this gives an estimated total one-off cost of between £39k and £146k, with a best estimate of around £85k.
96. The requirement for civil use explosives used for their own purposes to also be conformity assessed as described in paragraph 20 will affect between 25 – 30 companies responsible for mines and quarries and independent blasting service contractors who mix explosives manually on-site, such as ANFO. During the meeting with representatives from the quarries and blasting providers sector and HSE, industry concluded that the changes are relatively simple, even for the smaller companies, and that time spent on understanding the conformity assessment process would be minimal. HSE will continue to engage with industry and communicate changes via trade bodies prior to implementation, and it is expected that this will further minimise any familiarisation costs. This was validated by industry.
97. As a conservative estimate, we have estimated that it will take one hour of a functional manager's time at each affected company to read and understand their obligations under the Recast. Based on 25 – 30 businesses, at an FEC of £100 per hour, this gives a total one-off cost of between £2.5k and £3k, with a best estimate of £2.8k.
98. This gives a total cost to manufacturers for familiarisation in present value terms of between around £42k and £149k, with a best estimate of around £88k.

Total Costs to Manufacturers

99. The costs described above give a total estimated ten-year present value cost to manufacturers (including quarries and mines) of between £336k and £513k, with a best estimate of around £415k.

8.1.2 Distributors

100. Table 1 shows that around 25 distributors would be affected by the Recast.
101. We are using an FEC of £100 per hour, as mentioned in paragraph 59.
102. Changes in the Recast that are likely to affect distributors are additional obligations for checks by distributors, and changes in the required action if products are deemed unsafe or non-compliant. There are also some familiarisation costs.

Checking packaging and safety requirements

103. Under the Recast, the distributor must ensure that manufacturers and importers (where applicable) have complied with obligations in the recast

Directive (insofar as they have provided required documents and that the products are CE marked) before making explosives available on the market.

104. Based on consultation with industry, we expect that the current procedure to check products received for dispatch will not change, and that no additional costs would be incurred.

Action following receipt of non-compliant products

105. Under the Recast, if a distributor believes that an explosive is not in conformity they must not place that product on the market. Furthermore, where it presents a risk, they must inform the importer or manufacturer, and notify the competent authority (HSE), providing the competent authority of the member states where they made the explosive available with details, including as to the non-compliance and any corrective action. They must also fully co-operate with the authority at its request on any action taken to eliminate the risk posed by the explosives they have placed on the market.

106. However we have not estimated any additional costs, given the low likelihood that products are not in conformity, pose a risk, or pose a high enough risk to require withdrawal, as described in paragraphs 89 and 90 under costs to manufacturers. This was validated by the Recast Working Group, who also suggested that companies would already take appropriate action following receipt of a non-compliant product, hence there would be no additional cost.

Familiarisation

107. Feedback from the industry research group suggests that for distributors, one person would have to spend between two and three days to familiarise themselves with the changes and communicate these to the business. Based on an FEC of around £100 per hour, this gives a cost per firm between £1.5k and £2.3k, with a best estimate of around £1.9k.

108. Across the 25 businesses that are solely distributors of explosives, this gives a total estimated one-off cost of between £37.5k and £56.3k, with a best estimate of around £46.9k.

8.1.3 Importers

109. Table 1 shows that the Recast would affect around 10 importers.

110. We are using an FEC of £100 per hour, as mentioned in paragraph 59.

111. Changes in the Recast that are likely to impact importers are changes in packaging and safety requirements and changes in the required action if products are deemed unsafe or non-compliant. There are also some familiarisation costs.

Checking packaging and safety requirements

112. The current Directive does not place specific obligations on importers, but no product can be placed on the market unless all essential safety requirements (including conformity attestation) have been complied with.
113. Under the Recast Directive, the importer must ensure that the manufacturer has drawn up all technical documentation and that all instructions and safety information are present, and that this information accompanies the explosives or articles.
114. HSE understands from Recast Working Group discussions that the current procedure to check whether products received for dispatch are compliant will not change, and that no additional costs would be incurred.
115. Under the Recast, importers must also annotate explosives with their details, and this may be done on the explosive itself or in accompanying documentation. This represents an additional requirement. However, the industry group stated that this information would already be included in the product shipping label, and thus in practice they would not have to provide any further information. Accordingly, there are no costs associated with packaging and safety requirement for importers.

Action following receipt of non-compliant products

116. Under the Recast, if an importer suspects the essential safety requirements have not been met they must make arrangements for the explosive to be withdrawn or recalled from the market and take corrective action to ensure its conformity. If it presents a risk, importers must notify competent authorities (in the state they have placed them on the market) and notify them of any corrective measures taken.
117. However we have not estimated any additional costs, given the low likelihood that products are not in conformity, pose a risk, or pose a high enough risk to require withdrawal, as described in paragraph 89 and 90 on costs to manufacturers. Further, feedback from the Recast Working Group was that businesses would already undertake this type of action following receipt of non-compliant products regardless of the new requirement, and so there would be no additional cost.

Familiarisation

118. Based on consultation with industry, we estimate that for importers, one person would be required to spend between two to three days to familiarise. Using an FEC of around £100 per hour, this gives a cost per firm between around £1.5k and £2.3k, with a best estimate of around £1.9k.
119. Across the ten importers, this gives a total estimated one off cost of between around £15k and £22.5k, with a best estimate of around £18.8k.

8.1.4 Total Costs to Business

120. This gives a total estimated ten-year present value cost to business of between around £388k and £591k, with a best estimate of around £481k.
121. This is broken down as follows:
- To manufacturers, between around £336k and £513k, with a best estimate of around £415k
 - To importers, between around £15k and £23k, with a best estimate of around £19k
 - To distributors, between around £38k and £56k, with a best estimate of around £47k.

8.2 Costs to Government

8.2.1 Notified Body

122. Within GB there is currently only one NB for civil use explosives, the Health and Safety Laboratory (HSL). Although HSL is part of HSE, the ENB itself is separate and funds itself through charging industry for its work. As HSL is a public body, the costs described in this section are classified as costs to government.
123. The function of an ENB is to verify the compliance of a product by conducting a conformity assessment. It also ensures that the technical documentation sufficiently supports product compliance. If the NB is involved in the production control phase, its identification number will follow the CE marking. A fee in respect of the work to be undertaken is agreed with and paid by the manufacturer to the NB. When the notified body is convinced of product compliance, a certificate of conformity that confirms this will be issued. The manufacturer will then draw up the Declaration of Conformity (DoC) to declare that they are solely responsible for the product's conformity to the Directive.
124. The changes in the recast that impact the NB are slight modifications in the description of Module B (as described in the costs to manufacturers), and the cost for accreditation under BS EN ISO/IEC17065:12 and continuous monitoring against that standard.
125. Under the NLF, one of the measures also intended to ensure the quality of work performed by NBs (not just those in the civil explosives sector) are specific requirements for notifying authorities (the national authorities in charge of the assessment, notification and monitoring of NBs). BIS will be assessing the impact of specific requirements on notifying authorities, in their forthcoming IA covering the other eight directives in NLF.

Conformity Attestation

126. The interview with HSL revealed that no additional time would be required by the notified body to review additional information received for CE marking of products. The reason why no additional time would be required is that HSL believe that manufacturers already supply all of the information that the Recast Directive indicates as a requirement. This was validated by the Recast Working Group.

Accreditation

127. In order to attain accreditation as notified body for explosives, HSL would need to be approved by the United Kingdom Accreditation Service, UKAS.²³ HSL have indicated that this would precipitate a 10% increase in their running costs, currently £200k per annum - equivalent to £20k per year. As discussed in paragraphs 67 – 71, these costs will be passed on to manufacturers in the form of increased costs per CE approval. The net effect to ENB is therefore zero.

Familiarisation

128. As HSL are the only notified body, and they already have a clear understanding of the implications of the Recast on their business, we estimate that they will not incur any familiarisation costs during the appraisal period.

8.2.2 Regulator

Extension of powers under RAMS

129. Changes in the Recast mean that HSE inspectors would require a power to recall products. Currently, when products pose a risk, HSE inspectors could use powers under the Health and Safety at Work Act (HSWA) to issue enforcement or prohibition notices to firms; however, they do not have the power to recall or withdraw the product.

130. The extension to HSE inspectors of powers under the Regulation on Accreditation and Market Surveillance (RAMS) would require some additional training of the 28 specialist explosives inspectors. The HSE Explosives Inspectorate has estimated that the training would take about half a day and would be delivered internally. The cost of training the 28 specialist inspectors represents a one-off cost to Government; however any further training on requirements under the Recast for new inspectors is expected to be completed as part of their training process in the normal

²³ Notified Bodies can choose one of two routes for accreditation appointment: one is through the accreditation authority, and the other is a direct route through the National Authority to the Commission. They chose the former.

course of business. Based on the full economic cost of an inspector of around £557 per day, this gives an estimated total one-off cost to Government of around £7.8k.

Tightening of the safeguard clause

131. The tightening on the safeguard clause means there are now obligations on importers and distributors to notify relevant enforcement authorities when there are unsafe explosives. This means that HSE may receive notification of unsafe products more often from other EU authorities. This may increase the amount of information made available to HSE and HSE could therefore incur additional costs of acting on the information, and taking any relevant enforcement action. Given the low likelihood of receipt of unsafe explosives, and the fact that HSE would probably be informed and take appropriate action already, this cost is deemed low, and its estimation is therefore not considered proportionate.

8.2.3 Total Costs to Government

132. Given the above, this gives a total estimated ten-year present value cost to government of around £7.8k.

8.3 Benefits under the Recast

133. The following potential benefits of the Recast have been highlighted during consultation with industry and as part of the policy development process. It has not been possible to quantify and monetise any of the benefits, but they are described qualitatively below.

8.3.1 Improvement of Safety Standards

134. Any product that poses a risk under the Recast would be withdrawn from the market regardless of where it is in the supply chain, as all economic operators will have responsibility for the safety of the explosive and any risk posed throughout the supply chain. This would allow for a more rapid identification of such products and their swifter withdrawal, thereby limiting the scope for risks to human health and safety. However, the high level of existing standards and the extent to which such monitoring is already standard practice is expected to limit the extent of this benefit.

135. End users will have explosives that satisfy all current essential safety standards and are clearly marked accordingly, and receive safety instructions in a language that is easily understood to enable them to use the explosives safely in the correct manner and environment. This is expected to minimise situations wherein users are unclear of the risks or correct uses for the product due to sub-standard packaging. However, as

above, the high level of existing standards is expected to reduce the scope for such benefits.

8.3.2 Equivalence of Notified Body Standards

136. The recast provides a common legal framework across the EU, which in turn creates a level playing field for all economic operators and ENBs who will be obliged to comply with the Directive. Accreditation of ENBs will ensure standards of assessment and impartiality are maintained. Assessments of conformity undertaken by ENBs should be of similar standard throughout the EU, including those products imported from third countries. This is expected to reduce the scope for manufacturers to seek attestation of conformity through an ENB in the EU that may apply lower standards; as well as the scope for products entering the British market from outside the EU to fail to be assessed to the intended standard. This would thereby limit the scope for unsafe products to reach the British market.

8.3.3 Authorised Representatives

137. Under the recast, manufacturers can authorise or appoint an authorised representative by written mandate to place a product on the EU market. This person is neither the manufacturer nor an importer but acts on behalf of the manufacturer for the purposes of, for example, record keeping. As this is a new role and not mandated (a permissive change), it is for the manufacturer to decide to make such an appointment and any benefits to the manufacturer would at least be equal to the costs, or the manufacturer would not engage such a representative.

8.3.4 Benefits in enforcement and detection

138. Under the tightening of the safeguard clause that ensures the relevant enforcement authorities are informed about explosives that are non-compliant and that the equivalent response will be acted upon by all other Member States, HSE may receive notification of unsafe products more often from other EU authorities. This may increase the amount of information made available to HSE as regulator and allow for cross-border enforcement to be undertaken with greater regularity and at lower cost.

139. Notification to HSE from economic operators of any explosives that pose a risk would allow HSE to quickly identify the manufacturer, importer or distributor and ensure they take the appropriate action to have that product removed and/or recalled from the market until such time that it is compliant with the requirements under the Directive.

9 Direct Costs and Benefits Summary

140. This IA calculates the costs borne by business and government from the transposition of a European directive. No gold plating takes place. It is therefore not in scope of OITO.
141. The direct costs to business are calculated based on the costs estimated between pages 14 and 24. Total estimated ten-year present value costs to business are estimate to be between £388k and £591k, with a best estimate of around £481k.
142. The direct costs to Government are described between pages 24 and 26. Total costs to Government are estimated to be around £7.8k (ten-year NPV).
143. This gives a range for total costs of between £396k and £599k, with a best estimate of £488k (ten-year NPV).
144. The EANCB in 2014 prices is estimated to be around £0.05 million.
145. Section 8.3 includes a description of a number of potential benefits under the Recast, however it has not been possible to quantify and monetise any of these for the purposes of this final stage Impact Assessment. It is HSE's opinion that it is unlikely that the benefits described above would outweigh the costs of implementing EU requirements. This view is shared by industry.

10 Wider Impacts

146. Wider impacts have been considered and no impacts have been identified for:
- Statutory Equality Duties;
 - Human Rights;
 - Justice System;
 - Rural Proofing;
 - Social Impacts;
 - Environmental impacts; and
 - Sustainable development.
147. We have considered the criteria for wider competition and health and wellbeing impacts and do not consider that there is anything that needs to be addressed other than what is addressed in the main body of the IA.

11 Small Business Exemption

148. The civil uses explosives sector is mainly made up of a number of small and medium sized businesses, some of which were interviewed as we were calculating the main costs of the IA. The impacts on these businesses are therefore identical to those described in the main body of the IA.
149. European Directive requirements apply to all businesses, therefore small and micro businesses will need to comply with the new legislation that implements these requirements. It is important, however, to note that the high hazard nature of explosives is not necessarily linked to business size, and the potential for poor risk management leading to serious incidents when explosive products are deployed by end-users is the same whether the manufacturer, importer or distributor was a small or large business. It is important that all businesses operating in the civil use explosives sector are subject to the same regulatory regime to ensure that they continue to provide a high level of protection for both their workers and end-users of their products. There is therefore no scope to grant an exemption to small and micro businesses.

12 Summary

150. Table 2 summarises all quantified costs and benefits to business and government.

Table 2: Summarised quantified costs (£ thousands)

	Low	Likely	High
Manufacturers			
Costs of accreditation passed on to manufacturers	172	172	172
Conformity attestation for on-site mixing	122	155	191
Procedure when products pose a risk	Nil	Nil	Nil
Familiarisation	42	88	149
Total costs to manufacturers	336	415	513
Distributors			
Checking packaging and safety requirements	Nil	Nil	Nil
Familiarisation	38	47	56
Total costs to distributors	38	47	56
Importers			
Checking packaging and safety requirements	Nil	Nil	Nil
Familiarisation	15	19	23
Total costs to importers	15	19	23
Total costs to business	388	481	591
Government			
Regulator			
Extension of RAMS	7.8	7.8	7.8
Notified Body			
Conformity Attestation	Nil	Nil	Nil
Accreditation*	Nil	Nil	Nil
Familiarisation	Nil	Nil	Nil
Total costs to the NB	Nil	Nil	Nil
Total costs to Government	7.8	7.8	7.8
Total costs	396	488	599

Note: Figures are ten-year present values, in thousands, and totals may not sum due to rounding. *As discussed in Section 8.1.1, the NB will pass on the costs of accreditation to manufacturers, hence the net cost of renotification to the NB is zero.

151. The consultation stage IA identified some evidence gaps where further research would need to be undertaken in order to accurately and robustly quantify and monetise any impact. Table 3 records the areas that were highlighted in the consultation stage IA as requiring further research, and what has been done since to address the evidence gap.

Table 3: Summary of areas requiring further research for the final stage IA

Area	Further research undertaken
Full Economic Cost estimate for distributors and importers	The provisional estimate of £100 per hour (taken from initial interviews with business) was tested during consultation with industry and the Recast Working Group, and was deemed appropriate.
Additional time spent on conformity attestation by manufacturers	The consultation stage IA included an estimate of additional time spent by manufacturers preparing for conformity attestation under the Recast. The Recast Working Group concluded that in fact no additional time would be spent, as they already provide all relevant information.
Changes in packaging requirements for manufacturers	The Recast Working Group agreed that there would be no costs associated with packaging requirements under the Recast.
Changes in requirements for manufacturers on language of safety information	The consultation stage IA included an estimate of the costs of a technical translation (provided by a manufacturer). However, this was not used to give an overall cost across the industry in that IA. During the consultation and policy development process, it was found that in fact the requirement to provide safety information in a language easily understood by the 'end-user' was already stipulated in existing legislation, and therefore did not represent an additional duty (or cost).
Importer annotation of explosives with own details	The Recast Working Group suggested that the required importer details would already be provided as part of the product shipping label, and no additional cost would be incurred.
The time that the notified body must spend on preparing for the accreditation process and visits by UKAS	We have worked closely with the ENB (HSL) to estimate the likely impact of changes under the Recast, and provide an estimate of the cost of accreditation, including clarifying that the cost would be recovered from industry through higher fees. This is discussed in paragraph 69.