

<b>Title: Amendments to the Personal Protective Equipment at Work Regulations 1992 (PPER)</b> <b>IA No: HSE-IA2021-002</b> <b>RPC Reference No: RPC-HSE-5134(1)</b> <b>Lead department or agency: Health and Safety Executive</b> <b>Other departments or agencies: N/A</b>	<b>Impact Assessment (IA)</b>
	<b>Date: October 2021</b>
	<b>Stage: Final</b>
	<b>Source of intervention: EU</b>
	<b>Type of measure: Secondary legislation</b>
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<b>Summary: Intervention and Options</b>	
<b>RPC Opinion: GREEN</b>	

**Cost of Preferred (or more likely) Option (in 2019 prices & 2020 PV base year)**

Total Net Present Social Value	Business Net Present Value	Net cost to business per year	Business Impact Target Status
-£19.2m	-£327.9m	£38.1m	Non-qualifying regulatory provision

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

In November 2020, a judgment was handed down in the judicial review action in the High Court brought by the Independent Workers Union of Great Britain (IWGB) against the Secretaries of State for Department for Business, Energy and Industrial Strategy (BEIS) and the Department for Work and Pension (DWP). IWGB claimed that the government had failed to properly transpose the EU Directive 89/391/EEC<sup>1</sup> (“the Framework Directive”) and EU Directive 89/656/EEC<sup>2</sup> of 30 November 1989 (“the Personal Protective Equipment Directive”) into UK law.

The Framework Directive sets out the minimum standards for health and safety through a series of general principles, and the Personal Protective Equipment Directive (“PPE Directive”) sets out the minimum health and safety requirements for the use of personal protective equipment in the workplace for workers.

The UK implemented the PPE Directive via the Personal Protective Equipment at Work Regulations 1992<sup>3</sup> (“PPER”) which places duties on employers to their employees in regard to PPE. IWGB argued that the PPE Directive required these duties to be extended to ‘workers’, and not only ‘employees’.

The court found in favour of IWGB in relation to Article 3 the PPE Directive and judged that ‘limb (b) workers’, as defined by section 230(3)(b) of the Employment Rights Act 1996, should have been included in the scope of the original transposition of the Directive.

Generally, limb (b) workers:

- carry out casual or irregular work for a one or a number of organisation(s),
- receive holiday pay, but not other employment rights such as the minimum period of statutory notice, after one month of continuous service
- only carry out work if they choose to
- have a contract or other arrangement to do work or services personally for a reward (the contract doesn’t have to be written) and they only have a limited right to send someone else to do the work (subcontract)
- are not in business for themselves (they do not advertise services directly to customers who can then also book their services directly)

<sup>1</sup> [Directive 89/391/EEC - OSH "Framework Directive" - Safety and health at work - EU-OSHA \(europa.eu\)](https://eur-lex.europa.eu/eli/dir/1989/391/oj)  
<sup>2</sup> [Directive 89/656/EEC - use of personal protective equipment - Safety and health at work - EU-OSHA \(europa.eu\)](https://eur-lex.europa.eu/eli/dir/1989/656/oj)  
<sup>3</sup> [The Personal Protective Equipment at Work Regulations 1992 \(legislation.gov.uk\)](https://www.legislation.gov.uk)

In consultation with the Secretary of State for BEIS, the Secretary of State for DWP chose not to appeal the judgment. Therefore, the Health and Safety Executive (HSE) is making amendments to the PPER to ensure the PPE Directive is adequately transposed in line with the judgment.

This means employers will have a duty to provide limb (b) workers with the same health and safety protections in respect of PPE as they do currently for employees. In domestic health and safety law, Section 9 of the Health and Safety at Work Act 1974<sup>4</sup> contains a general duty not to charge employees for things done in pursuance of specific requirements of the relevant statutory provisions. The PPER is a relevant statutory provision and therefore PPE is provided free of charge to employees. The amendment to the PPER will modify how section 9 applies to the PPER to ensure PPE is provided free of charge to limb (b) workers.

**What are the policy objectives of the action or intervention and the intended effects?**

The court judgment found the UK Government had failed to fully transpose the PPE Directive in PPER as they did not extend PPE protections to workers. By amending the PPER to provide limb (b) workers with rights to PPE (where it is found necessary during a risk assessment), the Government will ensure that the PPE Directive has been transposed to align with the judgment. Employers' duties include the assessment and provision of equipment, ensuring PPE is suitable for use, the maintenance and replacement of PPE and other duties around the information, instruction, training and use of PPE.

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

**Option 1** – Do nothing. The 'do nothing' option is the baseline. This option is not preferred as the requirement to amend the PPER arises from a judicial review. If the PPER is not amended, UK courts will interpret the PPER in light of the judgment (as they should) as individual cases arise. This could lead to differing interpretations from judges and an extension in the interpretation of the judgment.

**Option 2** – Amend the PPER, such that they extend the duties on employers by the regulations to limb (b) workers, as well as employees. This is the preferred option as it aligns with the High Court judgment and ensures the PPE Directive is adequately transposed.

**Options not being considered** – Amending current PPER guidance is not considered an option as it already makes reference to workers as well as employees. Legislative amendments to the PPER will provide legal clarity as discussed in Option 1 and will enable limb (b) workers who may have a dispute with an employer to be clear on their entitlement to PPE to be provided free of charge. Amendments to the PPER will ensure HSE inspectors are able to enforce the change through the specific provisions of the PPER as well as the current action that may be taken under the general section 3 duty of HSWA in relation to PPE.

Will the policy be reviewed? Yes If applicable, set review date: **6 April 2026**

Is this measure likely to impact on international trade and investment?	No			
Are any of these organisations in scope?	<b>Micro</b> Yes	<b>Small</b> Yes	<b>Medium</b> Yes	<b>Large</b> Yes
What is the CO <sub>2</sub> equivalent change in greenhouse gas emissions? (Million tonnes CO <sub>2</sub> equivalent)	<b>Traded:</b> NA		<b>Non-traded:</b> NA	

*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  Date: 18/10/2021  
**HSE Chief Economist:** \_\_\_\_\_

<sup>4</sup> Health and Safety at Work etc. Act 1974 (legislation.gov.uk)

# Summary: Analysis & Evidence

# Policy Option 1

Description: Do Nothing

## FULL ECONOMIC ASSESSMENT

Price Base Year	PV Base Year	Time Period	Net Benefit (Present Value (PV)) (£m)		
			Low: N/A	High: N/A	Best Estimate: N/A

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

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

Not applicable. This is the baseline case against which all other options are compared.

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

Not applicable. This is the baseline case against which all other options are compared.

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

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

Not applicable. This is the baseline case against which all other options are compared.

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

Not applicable. This is the baseline case against which all other options are compared.

Key assumptions/sensitivities/risks	Discount rate (%)	3.5%
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Not applicable

## BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:			Score for Business Impact Target (qualifying provisions only) £m:
Costs: Not applicable	Benefits: Not applicable	Net: Not applicable	Not applicable

## Summary: Analysis & Evidence

## Policy Option 2

**Description:** Amend the Personal Protective Equipment at Work Regulations 1992 to extend PPE protections to workers.

### FULL ECONOMIC ASSESSMENT

Price Base Year	PV Base Year	Time Period	Net Benefit (Present Value (PV)) (£m)		
2020	2022	10 years	Low: -24.3	High: -19.2	Best estimate: -21.7

COSTS (£m)	Total Transition (Constant Price) Years		Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	6.5	1	13.3	119.2
High	8.3	1	79.5	682.6
Best Estimate	7.4	1	43.0	371.6

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

The requirement for organisations to provide PPE to limb (b) workers, free of charge, accounts for over 80% of present value costs, or a best estimate of around £300m. The requirement for organisations to assess the suitability of the PPE they provide to limb (b) workers account for around 6% of present value costs, or a best estimate of around £21m. Other requirements, including the requirement for organisations to maintain and store PPE, account for around 12% of present value costs, or a best estimate of around £46m. All costs are attributed to private businesses and third sector organisations.

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

None

BENEFITS (£m)	Total Transition (Constant Price) Years		Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	nil		11.8	100.1
High	nil		77.6	658.2
Best Estimate	nil		41.2	349.9

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

The provision of PPE free of charge accounts for around 87% of present value benefits or a best estimate of around £300m. These benefits accrue to limb (b) workers in the form of cost savings and potential health and safety benefits. Other monetised benefits account for around 13% of costs or a best estimate of £46m and include further potential health and safety benefits and time savings for limb (b) workers.

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

None

Key assumptions/sensitivities/risks	Discount rate
	3.5%

Calculating the number of people in GB with limb (b) worker status is complex and there are significant practical and conceptual challenges to estimating the number of limb (b) workers at any given point in time. This has meant the costs and benefits of this analysis carry some uncertainty. There are various other uncertainties presented throughout this IA. Analysts have used ranges in assumptions and erred towards over estimating costs to mitigate these uncertainties in a proportionate manner.

### BUSINESS ASSESSMENT (Option 2)

Direct impact on business (Equivalent Annual, 2020 prices and 2022 PV base year) £m:			Score for Business Impact Target (qualifying provisions only) £m:
Costs: 43.2	Benefits: nil	Net: 43.2	Not applicable

## **Evidence Base for Cost Benefit analysis of amendments to the Personal Protective Equipment at Work Regulations 1992**

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## A. Problem under consideration and rationale for intervention

1. The Personal Protective Equipment at Work Regulations 1992<sup>1</sup> (“the PPER”) transposed the EU Directive 89/656/EEC of 30 November 1989<sup>2</sup> (“the PPE Directive”) into UK law. The PPER applies in Great Britain. At that time, the regulations were made to provide Personal Protective Equipment (PPE) protections to ‘employees’ as the majority of people were employed under employment contracts.
2. Limb (b) workers tend to have more casual and flexible working arrangements to their employer(s), having increased freedom over when, how much and where they work. Limb (b) workers can sometimes work in the gig economy and examples include certain couriers and taxi drivers.
3. In 2020, a judicial review was brought by the Independent Workers of Great Britain Union (IWGB) against the UK government. IWGB argued that by not including ‘workers’ in scope of the PPER, the government had not adequately transposed the PPE Directive into UK law. The PPER place duties on employers in relation to the provision of personal protective equipment, along with associated duties, including storage of PPE, assessing the suitability of PPE, maintenance and training. PPE includes equipment such as safety boots, goggles, earplugs and gloves.
4. The court found in favour of IWGB on this point and concluded that Article 3 of the PPE Directive had not been adequately transposed by the UK Government as the obligations in relation to PPE only applied to employers with respect to their employees and not limb (b) workers. HSE is therefore making amendments to the PPER to extend the scope of the current regulations so that they apply employers’ duties towards limb (b) workers as well as employees. This will align with the court’s judgment on the scope of the PPER (as derived from the PPE Directive) and provide clarity for employers and their workers.
5. ‘Worker’ is not currently defined in the PPER, and so the amending regulations will draw on the definition of worker from s230(3) of the Employment Rights Act 1996 (ERA 1996)<sup>3</sup>;  
“..an individual who has entered into or works under– (a) a contract of employment; or (b) any other contract, whether express or implied and (if it is express) whether oral or in writing, whereby the individual undertakes to do or perform personally any work or services for another party to the contract whose status is not by virtue of the contract that of a client or customer or any profession or business undertaking carried on by the individual”
6. In ERA 1996, an employee comes under the definition of worker under limb (a), as they work under a contract of employment. They also have additional rights and responsibilities as an employee, as defined in section 230(1) of the ERA 1996, that do not apply to limb (b) workers such as unfair dismissal<sup>4</sup>.
7. This ensures the PPER, as amended, will be consistent with references to workers in employment legislation. In particular, it will be aligned with the ERA 1996 (as above) and with regulations such as the Working Time Regulations 1998 in the definition of worker.
8. Generally, limb (b) workers:
  - carry out casual or irregular work for a one or a number of organisation(s),

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<sup>1</sup> [The Personal Protective Equipment at Work Regulations 1992 \(legislation.gov.uk\)](https://www.legislation.gov.uk)

<sup>2</sup> [Directive 89/656/EEC - use of personal protective equipment - Safety and health at work - EU-OSHA \(europa.eu\)](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:31989L0656)

<sup>3</sup> [Employment Rights Act 1996 \(legislation.gov.uk\)](https://www.legislation.gov.uk)

<sup>4</sup> The consultation stage IA made reference to limb (b) workers not being eligible to SSP etc. Following further investigation, we believe this is misleading as eligibility for SSP is defined according to the Social Security Contributions and Benefits Act 1992, which is then adapted for narrow specific sets of circumstances by further regulations. Therefore, SSP eligibility is not determined by reference to the ERA 1996 itself.

- receive holiday pay, but not other employment rights such as the minimum period of statutory notice, after one month of continuous service
  - only carry out work if they choose to
  - have a contract or other arrangement to do work or services personally for a reward (the contract doesn't have to be written) and they only have a limited right to send someone else to do the work (subcontract)
  - are not in business for themselves (they do not advertise services directly to customers who can then also book their services directly)
9. The amending regulations will ensure those captured by the definition of a limb (b) worker are provided the same PPE protections as employees, and that employers fulfil their obligations which are described in paragraph 28 below. The amendments to the PPER will potentially affect every industry sector in which employers engage limb (b) workers and this includes the transport, construction, health and social care, agriculture and manufacturing sectors, amongst others.

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

10. The UK government made the decision not to appeal the court judgment and is aligning with it by amending the PPER to bring limb (b) workers into scope to provide clarity for employers and workers. Therefore, this analysis is not required to choose between different options, but to place an indicative estimate on the costs and benefits of amending the PPER to include limb (b) workers. This has been taken into account when determining the proportionality of the evidence collection as a decision to amend the PPER has been made and is not for consideration for the purposes of this impact assessment.
11. All assumptions in this IA (for example, the number of workers impacted) are based on working conditions prior to COVID-19 lockdown measures, for multiple reasons:
- Generally, unless someone is knowingly working in very close proximity to the COVID-19 virus, such as in a healthcare setting, precautions other than COVID-19 PPE are generally sufficient to protect the worker.
  - We do not expect the COVID-19 pandemic to last indefinitely and therefore do not want estimated impacts over the appraisal period to be based on a temporary situation, but rather what is considered to be the 'normal' use of PPE and limb (b) worker activity in the economy.
  - For our impacts to not be based on this expected temporary situation would require two sets of assumptions (COVID-19 and post-COVID-19). This would require significant additional analytical resource (for example, extra survey questions to provide information about individuals both in 'normal' times and during the COVID-19 pandemic). In addition to this, evidence gathered about individuals and businesses during the COVID-19 pandemic would quickly become out of date, given the fast-changing nature of the pandemic and restrictions. These points taken together with the purpose of this IA set out in paragraph 10 lead analysts to conclude that it is proportionate to assess impacts assuming 'normal' times.
12. In order to estimate costs and benefits associated with the amendment to the PPER, it is necessary to estimate the current size of the limb (b) worker population in GB and gain an understanding of the characteristics of this population and the organisations they work for. Employment status for employment rights purposes is determined by the nature of the contract between the two parties, provided that the contract reflects the reality of the working arrangement and does not have the objective of subverting statutory protections for vulnerable workers. In particular, the courts have developed high-level principles via a series of cases to

help reach conclusions for complex cases, ensuring the legislation's intention is upheld whilst maintaining the flexibility of the courts to adapt to modern working practices.

13. In practice, this means most individuals in the labour market are clearly employed or self-employed, but it can be less clear for those at the margins, particularly for those between the limb (b) worker and self-employed boundary, as evidenced by case law. This makes calculating the number of people in GB with limb (b) worker status complex and there are significant practical and conceptual challenges to estimating the number of limb (b) workers at any given point in time.
14. In light of these challenges and the purpose of this IA set out in paragraph 10, HSE aimed to make an indicative estimate of the limb (b) population and the organisations they work for, rather than a definitive estimate.
15. HSE commissioned three YouGov<sup>5</sup> surveys and hosted a public consultation. The first YouGov survey reached over 4,000 adults in GB, including over 2,800 people who were in work before the COVID-19 lockdown measures began in GB. The second YouGov survey reached over 2,000 senior decision-makers in businesses and organisations in GB. The third YouGov survey was commissioned to further understand costs and benefits and reached over 2,000 senior decision-makers in private sector businesses in GB. The data from these surveys has been analysed by HSE to provide assumptions for use in a cost benefit analysis (see section G), and to triangulate assumptions from other sources.
16. In the first YouGov survey described above, individuals were asked a number of questions with the aim of determining their limb (b) worker status. As set out in paragraph 13, determining limb (b) worker status is complex and so HSE created simplified questions to aid respondents' understanding and obtain an indicative estimate of the limb (b) worker population. While these questions do not exactly define a limb (b) worker, HSE social researchers' assessment was that using more complex questions would be detrimental to respondents' understanding of questions and would require a disproportionate amount of resource for the purpose of this IA.
17. In the second YouGov survey described above, senior decision-makers were also asked some simplified questions designed to provide indicative estimates of the limb (b) population and the organisations which they work for, as well as other information about these groups. These were slightly different to the questions asked in the first YouGov survey to account for differences in the respondent group. Since the undertaking of this survey, HSE further refined its understanding of how to identify a limb (b) worker and assessed that questions asked here were insufficient to provide indicative estimates of the limb (b) population and the population of businesses that hire them. Good quality data on individuals who carried out casual work for these organisations, the use of PPE and the cost of providing PPE was obtained and was used to triangulate assumptions used in this IA.
18. Following the first two YouGov surveys, HSE deemed it proportionate to commission a third YouGov survey for multiple reasons:
  - Low numbers of potential limb (b) workers were identified using the first YouGov survey, creating uncertainties in initial analyses.
  - The first YouGov survey targeted workers. Given the complexities associated with estimating the limb (b) worker population described in paragraphs 12 and 13, HSE deemed that it may be beneficial to gather additional data from the perspective of businesses.
  - Following the first two surveys described in paragraph 15, HSE refined its understanding of how to identify a limb (b) worker by engaging with relevant stakeholders.
19. This third YouGov survey reached senior decision-makers within the private sector in GB. Again, questions in this survey were designed to determine whether respondents identify limb

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<sup>5</sup> YouGov is an international research data and analytics group; see [YouGov | About YouGov Company](#) for more information.



- (b) workers in their workforce based on simplified characteristics of limb (b) workers, in order to provide indicative estimates of the limb (b) population and the organisations they work for.
20. Further data and verification of existing findings was sought during public consultation. This took place over a four-week period from Monday 19 July 2021 to Monday 17 August 2021. The survey was hosted by HSE on the HSE Consultation Hub (Citizen Space) and reached key business and industry stakeholders, and other interested parties such as health and safety professionals, consultants and trainers. The consultation received 245 full or partial responses and two written responses.
21. Given the purpose of this IA discussed in paragraph 10, this level of analysis is considered sufficient and proportionate.

## C. Description of options considered

22. **Option 1 – Do nothing.** Do nothing. The ‘do nothing’ option is the baseline. This option is not preferred as the requirement to amend the PPER arises from a judicial review. If the PPER is not amended, UK courts will interpret the PPER in light of the judgment (as they should) as individual cases arise. This could lead to differing interpretations from judges and an extension in the interpretation of the judgment.
23. **Option 2 – Amend the PPER,** Amend the PPER, such that they extend the duties on employers by the regulations to limb (b) workers, as well as employees. This is the preferred option as it aligns with the High Court judgment and ensures the PPE Directive is adequately transposed.
24. **Options not being considered** - Amending current PPER guidance is not considered an option as it already makes reference to workers as well as employees. Legislative amendments to the PPER will provide legal clarity as discussed in Option 1. Amendments to the PPER will ensure HSE inspectors are able to enforce the change through the specific provisions of the PPER as well as the current action that may be taken under the general section 3 duty of HSWA in relation to PPE.

### HSE’s preferred Option

25. **Option 2** is HSE’s preferred option, as it enables the adequate transposition of the PPE Directive, ensures the government aligns with the court judgment, and provides legal certainty for limb (b) workers and employers in providing PPE protection.

## D. Policy objective

26. The High Court found that the UK did not adequately transposed the PPE Directive in 1992 as the duties on employers only extended to employees. The objective is to amend the PPER to place duties on employers in respect to limb (b) workers as well as employees and ensure limb (b) workers have the same rights in respect to PPE as employees. This will ensure alignment with the court judgment on the scope of the PPER. Not doing so could lead to differing interpretations from judges of the PPER in future litigation which may cause confusion for both businesses and workers.
27. PPE that is required to reduce risks arising from: lead exposure, ionising radiation, asbestos, noise, substances hazardous to health (for example: chemicals, fumes, dusts, non-water vapours, nanotechnology, and/or gases), is regulated and enforced under regulations other

than the PPER<sup>6</sup>. These types of PPE are excluded from PPER and hence are out of scope of this amendment.

28. The following obligations/requirements under the PPER will be extended to limb (b) workers:

- **Regulation 4** relates to the provision of suitable PPE to an employee by their employer.
- **Regulation 5** relates to ensuring that where two (or more) pieces of PPE are worn simultaneously, they are compatible with each other.
- **Regulation 6** specifies that before choosing any personal protective equipment an employer or self-employed person shall ensure an assessment is made to determine whether the PPE they intend to provide will be suitable. The Management of Health and Safety at Work Regulations 1996<sup>7</sup> (“the MHSW Regulations”), provision 3 (1) requires every employer to make a suitable and sufficient assessment of the risks to health and safety of his (a) employees and (b) persons not in his employment arising out of or in connection with the conduct of his undertaking (which already captures limb (b) workers). Whilst the MHSW Regulations already require employers to assess risk and identify what type of PPE limb (b) workers require, the assessment required under PPER adds a level of detail by requiring information about the suitability of that PPE for the task. An example of suitability could be whether the PPE complies with a particular British or international standard.
- **Regulation 7** requires that employers shall ensure that any PPE provided to their employees is maintained, or cleaned/replaced, as needed.
- **Regulation 8** refers to accommodation for PPE, where it can be damaged or affected by, for example, chemicals, sunlight, humidity etc.
- **Regulation 9** requires that the employer ensures that suitable information, instruction and training is provided to their employees who are required to wear PPE.
- **Regulation 10** relates to employers ensuring that PPE that is provided to their employees is properly used.
- **Regulation 11** places a duty on employees to report the loss or defect of PPE that has been provided to them.
- **Section 9 of the Health and Safety at Work Act 1974** is the general duty not to charge employees for things done in pursuance of specific requirements of the relevant statutory provisions. This applies to requirements under the PPER as it is a relevant statutory provision. It will be modified in its application to the PPER to ensure that limb (b) workers are not charged for PPE provided to them.

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

29. The preferred option will be given effect via secondary legislation, by amending the existing PPER. This will widen the scope of the legislation so that employers’ duties to employees will also extend to limb (b) workers, achieving the policy objective and aligning with the court judgment.
30. HSE and Local Authorities (via Environmental Health Officers) are the current enforcing authorities for the PPER in the premises allocated to them by the Health & Safety (Enforcing Authority) Regulations 1998 (HS(EA)R). Typically, this means that HSE are the enforcing

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<sup>6</sup> See: [The Control of Lead at Work Regulations 1998](#), [The Ionising Radiations Regulations 2017](#), [Control of Asbestos Regulations 2012](#), [The Control of Substances Hazardous to Health Regulations 2002](#), and [The Control of Noise at Work Regulations 2005](#) for further information

<sup>7</sup> [The Management of Health and Safety at Work Regulations 1999 \(legislation.gov.uk\)](#)

authority for the perceived higher risk premises, such as manufacturing, construction, agriculture and food processing whilst Local Authorities have responsibility for offices, shops and warehouses, for example. This is simplified in the A-Z on the HSE website: <https://www.hse.gov.uk/foi/internalops/og/og-00073-appendix1.htm>.

31. Enforcement decisions relating to the application of the amending legislation will continue to be made according to HSE's enforcement management model, enforcement policy statement, regulators guide and the code for crown prosecutors.
32. HSE inspectors are responsible for enforcing the PPER during inspections and make sure employers are complying with the regulations in the premises allocated to them by the HS(EA)R. Once the scope of the regulations is extended to limb (b) workers, inspectors will need to ensure that PPE is provided, stored and maintained for limb (b) workers where appropriate. They will also need to ensure limb (b) workers are given instructions and training for any PPE that is provided.
33. Although enforcement activity may increase as a result of the widening of the scope of the legislation, HSE's internal discussions with the various sector leads have identified that the vast majority of limb (b) workers who fall into scope of the amendments may be working in areas where PPE may not be required in any case.
34. Piloting or trialling these amendments to the PPER is not appropriate as they are being made to align with a court judgment and achieve the original policy intent. Guidance will be provided to industry and stakeholders to ensure they are aware of the changes to the PPER and when they will come into effect.

## **F. Research undertaken to inform this IA**

35. The information and evidence used to inform this IA has been collected from a number of different sources:
  - A YouGov omnibus survey, with over 4,000 adult respondents. For reasons set out in paragraph 16, this survey provided indicative estimates of the limb (b) population. This survey also provided other key parameters for use in this IA.
  - A second YouGov survey was commissioned to gather evidence from businesses and organisations and received over 2,000 responses from senior decision-makers. As discussed in paragraph 17, data from this survey was deemed insufficient to provide indicative estimates of the limb (b) population and the organisations they work for. This survey did provide information on PPE use and cost for casual workers.
  - A final YouGov business survey was undertaken with responses from over 2,000 senior decision-makers within the private sector in GB. The purpose of this survey was to provide further data on specific areas where considerable uncertainty remained following preceding research. As discussed in paragraph 19, this survey aimed to provide indicative estimates of the limb (b) population and the organisations they work for, as well as providing other key parameters for use in this IA.
  - Data was collected from the British Safety Industry Federation (BSIF). The BSIF asked members to provide data on their retail pricing for PPE.
  - Discussions with HSE specialists (including inspectors) for a wide range of business sectors such as transport, manufacturing, construction and agriculture were used to inform and verify various aspects of the analysis.
  - Public consultation questions. The public consultation was used to gather further evidence and verify the evidence collected from BSIF, the first YouGov survey, and HSE specialists. The consultation received 245 online responses and two letters from workers, businesses and their representative organisations as well as health and safety professionals and consultants.
  - Stakeholder engagement and a literature review was also conducted to gather a variety of additional evidence, which included published reports and statistics from the Department for

Business, Energy and Industrial Strategy (BEIS), the Office for National Statistics (ONS); and discussions with unions.

36. All figures presented in this IA are the product of HSE data analysis. Where primary survey data was collected by YouGov, HSE has completed calculations on this raw data and figures presented in the IA are not the YouGov survey data itself. Analysis was triangulated and sense-checked through referencing ONS and BEIS data, qualitative documents, HSE expert opinion, comparing results between the different surveys, and data collected in the public consultation.

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

### **G.1 Option 1 - Do nothing**

37. This is the status quo, in other words that the PPER are not amended to extend employers' duties in regard to PPE protections for their limb (b) workers. If changes are not made to the PPER, a claim could be brought by a citizen against the UK government for failure to implement EU law, as it should have been done in 1992. Although low, there is also a potential risk of infraction proceedings being brought by the European Commission for the UK's failure to properly implement the PPE Directive.
38. 'Do nothing' is not a valid option as the judgment forms part of UK law and is how the PPER will be interpreted by courts. Not proceeding with this legislation would likely cause confusion for business and workers. Workers could continue bringing claims to court and this creates the prospect of legal uncertainty for business as to the proper ambit of health and safety obligations; and of judges extending legislation through interpretation.

### **G.2 Option 2 – amend the PPER**

39. The preferred option is to bring forward amending legislation to widen the scope of the PPER to include limb (b) workers. Additional costs as a result of the changes will fall to employers who have to comply with the PPER for limb (b) workers who previously would not have been in scope of the PPER. Additional benefits will accrue to limb (b) workers who were previously not in scope of the PPER.

#### **G.2.1 – Costs of additional requirements**

40. Section D sets out duties placed on employers by PPER that will be extended to limb (b) workers under Option 2. Additional requirements falling on employers are as follows:
- i. Employers will need to ensure suitable PPE is provided to their limb (b) workers who may be exposed to a risk to their health and safety while at work, unless that risk is already controlled by other means;
  - ii. Employers will need to provide PPE free of charge to limb (b) workers<sup>8</sup>;
  - iii. Before providing the PPE, the employers will need to make an assessment of whether the PPE is suitable for limb (b) workers and ensure that this assessment is reviewed as appropriate;
  - iv. Employers will need to ensure the PPE they provide to limb (b) workers is maintained (including cleaning or replacing PPE);
  - v. Employers will need to provide storage for any PPE provided to their limb (b) workers when it is not being used;
  - vi. Employers must ensure that appropriate information, instruction and training is provided to limb (b) workers to ensure they know about: the risks the PPE will limit or avoid; and the manner in which the PPE is to be used;
  - vii. Employers will need to ensure any PPE provided to their limb (b) workers is properly used.

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<sup>8</sup> This duty is placed on employers in the Health and Safety at Work Act 1974 rather than the PPER

41. This section will estimate the additional costs falling on employers as a result of these additional requirements. The section will set out estimates of:
  - a. The estimated total number of limb (b) workers in Great Britain;
  - b. The number of limb (b) workers that require PPE and are not provided with it;
  - c. The additional cost of purchasing PPE for limb (b) workers;
  - d. The number of affected organisations;
  - e. The additional cost of assessing suitability; and
  - f. Other costs
  
42. Sections (a)-(c) set out the main additional costs arising from requirements (i) and (ii); sections (d) and (e) set out additional costs of requirement (iii); and section (f) sets out the additional costs arising from requirements (iv)-(vii), and a further additional cost arising from requirements (i) and (ii).
  
43. It is assumed that there will be 100% compliance with the new requirements for employers to include limb (b) workers in the PPER. While there may be some workers who continue to have to provide their own PPE because their employer is not compliant with the law, it is not possible to predict this compliance rate with any accuracy. We therefore assume 100% compliance with the new requirements under Option 2, which will ensure costs are not underestimated. Similarly, we assume that there is 100% compliance with current legal requirements as the purpose of this IA is not to assess the costs of the non-compliant moving into a state of compliance, but rather the costs due to the changes in the requirements themselves.

### **G.2.1.a – The estimated total number of limb (b) workers in Great Britain**

44. National statistics such as the ONS's Labour Market Overview<sup>9</sup> do not provide estimates of the limb (b) worker population. As set out in paragraph 13, identifying the number of limb (b) workers is complex, and even a high-resource survey project (for example a survey with an extensive, complex question set asked of a large number of individuals) could be expected to carry a reasonable degree of uncertainty when attempting to estimate the limb (b) population. In light of these challenges and on grounds of proportionality (set out in section B), HSE aimed to make an indicative estimate of the limb (b) population.
  
45. HSE commissioned the first YouGov omnibus survey of the GB population which reached over 4,000 individuals, approximately 2,800 of whom identified themselves as being in work before the COVID-19 lockdown in GB (i.e. pre-March 2020). As discussed in paragraph 16, these individuals were asked a set of questions to determine whether they identify with some simplified characteristics of limb (b) workers. Forty respondents, or 1.42% of those in work, responded in a way which identified them as a potential limb (b) worker. Extrapolating these results over the 32 million people in paid employment from December 2019-February 2020<sup>10</sup>, gives an estimated number of limb (b) workers in GB of around 460 thousand.
  
46. There are a number of uncertainties associated with this estimate:
  - As set out in paragraph 44, challenges relating to identifying limb (b) workers mean that any survey attempting to estimate the population of limb (b) workers would carry some degree of uncertainty.
  - As set out in paragraph 16, individuals were asked about simplified characteristics of limb (b) workers both for social research purposes and on grounds of proportionality. Through engagement with stakeholders and thorough analysis of survey data, analysts

<sup>9</sup> [Labour Market Overview, UK - Office for National Statistics \(ons.gov.uk\)](https://ons.gov.uk/labour-market-overview)

<sup>10</sup> Data obtained from the Office of National Statistics, Regional analysis for GB estimates: Available at: [KS1 Key statistics for all regions - Office for National Statistics](#)

concluded that survey methodology was likely to exclude some limb (b) workers from our counts.

- As Employment Status for employment rights is complex to determine and spans a wide range of different working relationships, individuals or limb (b) workers undertaking the survey may have not been able to identify with the survey's simplified characteristics of limb (b) workers. For example, if an individual misinterpreted one of the questions for determining their status, the result would have been impacted.
47. Uncertainties explained above suggest that the estimate in paragraph 45 may be an underestimate rather than an overestimate. For reasons set out in paragraph 18 and to avoid underestimating costs, HSE commissioned the third YouGov survey of senior decision makers in GB businesses, asking them whether their business hired limb (b) workers and if so, how many. This survey sample received just over 2,000 responses. Using data from the BEIS business population estimates<sup>11</sup> and user-requested data from the ONS<sup>12</sup>, analysts extrapolated these results to give an estimate of the number of limb (b) workers in GB of approximately 2.4 million. As set out in paragraph 19, this estimate is intended to be indicative.
48. This estimate has some benefits in comparison to the estimate described in paragraph 45:
- As described in paragraph 46, limb (b) workers themselves may not identify with the first survey's simplified characteristics of limb (b) workers. Businesses on the other hand are more likely to know their workers' employment status for rights as they have a duty to comply with the Employment Rights Act 1996. Under section 1 of the Employment Rights Act, businesses are required to issue a statement of employment particular to each employee and limb (b) worker at the beginning of the employment relationship.
  - As set out in paragraph 46, HSE refined its understanding of how best to capture limb (b) workers following the first YouGov survey. The third YouGov survey therefore used a refined question set with the intention of excluding fewer limb (b) workers.
49. The estimate of around 2.4 million limb (b) workers also has some uncertainties:
- As previously discussed, challenges relating to identifying limb (b) workers mean that any survey attempting to estimate the population carries some degree of uncertainty.
  - The survey still presented simplified characteristics of limb (b) workers to enhance respondents' understanding at the expense of complete accuracy of definition.
  - Due to the flexible nature of limb (b) work, a survey of businesses may overestimate the limb (b) population. Limb (b) workers who work, for example, for two different organisations may be counted twice by a business survey, as both organisations may include them in their counts.
50. Outside of core uncertainties (issues in identifying limb (b) workers and HSE's use of a simplified definition), the estimate of around 460 thousand tends towards being an underestimate; and the estimate of around 2.4 million tends towards being an overestimate. On grounds of proportionality set out in Section B, and to account for uncertainties discussed in this section, we take a range approach and estimate that the limb (b) worker population in GB is between 0.46 million and 2.4 million with a midpoint best estimate of approximately 1.4 million limb (b) workers. As set out in section B, we intend this estimate to be indicative for the purposes of this IA.
51. A 2018 BEIS IA on "Extending the right of a written statement to non-employee workers"<sup>13</sup> estimated the limb (b) population in the UK to be between 1.4m and 1.7m<sup>14</sup>. This BEIS IA also

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<sup>11</sup> [Business population estimates 2020 - GOV.UK \(www.gov.uk\)](https://www.gov.uk/business-population-estimates-2020)

<sup>12</sup> [Enterprises by Broad Industry and employee size - Office for National Statistics \(ons.gov.uk\)](https://ons.gov.uk/enterprises-by-broad-industry-and-employee-size)

<sup>13</sup> [Extending the right to a written statement to non-employee workers: IA \(publishing.service.gov.uk\)](https://publishing.service.gov.uk/2018/07/26/extending-the-right-to-a-written-statement-to-non-employee-workers-ia)

<sup>14</sup> The lower bound was based on DTI research from 1999; while the upper bound was derived from more recent research by the Chartered Institute of Professional Development (CIPD) in 2015. Both estimates are subject to significant uncertainty.

emphasises uncertainty surrounding these estimates, but it does allow us to sense-check our estimates against estimates resulting from different methodologies.

52. Given that BEIS's 2018 IA estimates fall within the HSE's stated range, and that the intention of this IA is to make an indicative estimate of costs and benefits, we continue our analysis using as our estimate of the number of limb (b) workers a range between around 0.46 million and 2.4 million, with a best estimate of around 1.4 million.

### **G.2.1.b The number of limb (b) workers that require PPE and are not provided with it**

53. In order to estimate the additional cost to organisations of providing PPE free of charge to limb (b) workers, it is first necessary to estimate the number of limb (b) workers who require PPE to perform their role. Furthermore, it is necessary to consider whether there might already be some employers who are providing PPE to limb (b) workers free of charge before the proposed amendments come into force. If so, there will not be any additional costs of providing PPE for these employers.

#### Number of limb(b) workers who require PPE

54. As explained in paragraph 50, analysts estimate a limb (b) worker population in GB of between 0.46 million and 2.4 million with a best estimate of approximately 1.4 million limb (b) workers.
55. The first YouGov survey asked 40 limb (b) workers<sup>15</sup> whether they needed PPE to carry out their working duties. Eight out of 40 (20%) identified as needing non-COVID-19 PPE.
56. This estimate is based on a low sample size and hence is subject to uncertainty. Therefore, analysts triangulated this information with respondents to the survey who identified as carrying out 'casual or irregular work', which includes the limb (b) workers. Of this group, 137 of 562 (24%) identified as needing non-COVID-19 PPE.
57. So as not to underestimate costs, analysts adopt a range approach assuming that between 20% and 24% with a midpoint best estimate of 22% of limb (b) workers require PPE.
58. Applying this to the estimated limb (b) population gives between 0.09 million and 0.57 million with a best estimate of 0.31 million limb (b) workers who require PPE to carry out their working duties.

#### Number of limb (b) workers who require PPE but are not already provided with it

59. The first YouGov survey asked limb (b) workers who required PPE whether or not they pay for it themselves. However, as described in paragraph 55, only eight limb (b) workers identified as needing PPE to carry out their working duties. To estimate a proportion of limb (b) workers that pay for their own PPE based on a sample size of eight would be subject to a very large degree of uncertainty. This provided further justification for HSE to collect further evidence by commissioning the third YouGov survey described in sections B and F.
60. This third YouGov survey identified 324 businesses that had limb (b) workers who required PPE. Of these businesses, 101 (or 31%) did not provide all required PPE to their limb (b) workers. This YouGov survey's sample of business is selected to be representative of GB businesses weighted by business size, and so results are weighted to reflect the average experience of workers. As such, we assess it reasonable to assume that around 31% of limb (b) workers who require PPE to carry out their working duties do not get it provided by the organisation they work for.
61. Applying 31% to the number of limb (b) workers that require PPE estimated in paragraph 58 gives an estimate of between 28 thousand and 177 thousand with a best estimate of 97

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<sup>15</sup> As discussed previously, limb (b) workers were 'identified' using simplified characteristics.

thousand limb (b) workers who require PPE and are not provided with it by their employer under the baseline scenario (Option 1).

Growth in the number of limb (b) workers who require PPE but are not already provided with it

62. In order to estimate costs over the 10-year appraisal period, it is necessary to consider whether the number of limb (b) workers who need to be provided with additional PPE by their organisation will change over time. As set out in paragraph 44, national statistics do not estimate the population of limb (b) workers, hence we cannot directly analyse trends (i.e. growth or decline) in the overall limb (b) worker population over time. However, to provide an estimate for use in this IA of possible growth in the number of limb (b) workers who require PPE, but are not already provided with it, national statistics do make estimates of the number of individuals working under ‘zero-hours contracts’, which could serve as a useful proxy. The government’s Employment Status Review in 2015<sup>16</sup> states that “In general, most of the people who fall into the ‘[limb (b)] worker’ category will be working in atypical or non-standard arrangements”. Furthermore, guidance on gov.uk<sup>17</sup> suggests that contracts that use terms like ‘zero hours’, when combined with other factors, could indicate that an individual is more likely to be a limb (b) worker. Given this, and the lack of availability of better data, analysts examine trends in the population of individuals working under ‘zero-hour contracts’ and assume these to be a reasonable indicator of trends in the affected limb (b) population who require PPE, but are not already provided with it. This assumption is only used for the purposes of estimating growth in affected limb (b) workers in this IA, given the lack of availability of better data and in order to err towards overestimating costs rather than risk underestimating them (other, more general, growth rates considered were lower and hence would lead to lower costs). Analysts do not suggest that this is a suitable proxy growth rate for the population of limb (b) workers in general.
63. Data from the Labour Force Survey<sup>18</sup> on the five years preceding the COVID-19 lockdown in the UK are presented in Table 1:

**Table 1: Number of individuals on zero-hour contracts (2014-2019)**

	Oct-Dec 2014	Oct-Dec 2015	Oct-Dec 2016	Oct-Dec 2017	Oct-Dec 2018	Oct-Dec 2019
<b>Number of individuals on ‘zero-hour contracts’ (thousands)</b>	699	804	907	902	844	974

64. The population of individuals on zero-hour contracts has grown by an average of 7.9% per annum between 2014 and 2019, but seems to have slowed in more recent years, growing only by an average of 2.5% per annum between 2016 and 2019. We assume that the limb (b) population of GB will grow at the midpoint of these two values - approximately 5.2% per annum – capturing the more conservative growth over recent years but also the more rapid growth between 2014 and 2016 so as not to underestimate costs. We further assume that the proportion of limb (b) workers who need PPE but are not provided with it under the baseline would remain constant over time, as any analysis of trends in PPE provision is deemed disproportionate for the purposes of the IA. Taken together, these assumptions give a limb (b) population of GB that require PPE but are not provided with it (i.e., will require additional PPE to be bought by their employer under Option 2) as presented in Table 2 below.

<sup>16</sup> <https://www.gov.uk/government/publications/employment-status-review-2015>

<sup>17</sup> <https://www.gov.uk/employment-status/worker>

<sup>18</sup> EMP17: People in employment on zero hours contracts - Office for National Statistics (ons.gov.uk)



**Table 2: Number of limb(b) workers who will require additional PPE under Option 2 (thousands)**

	Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Number of limb (b) workers who will require additional PPE under option 2 (thousands)	Low	28	30	32	33	35	37	39	41	43	45
	Best	97	102	107	113	118	125	131	138	145	153
	High	177	186	196	206	217	228	240	252	265	279

Note: totals may appear not to sum due to rounding

### G.2.1.c - The additional cost of purchasing PPE for limb (b) workers

65. Section G.2.1.b set out the additional number of limb (b) workers who will need to be provided with PPE free of charge under Option 2. There are a variety of different approaches that could be taken to estimate the cost of purchasing PPE for these limb (b) workers. Early exploration of potential approaches by HSE analysts can be found in the consultation stage IA<sup>19</sup>.
66. One potential approach is to estimate costs on a ‘bottom-up’ basis, either by PPE item or by sector, as follows:
- By item: find the percentage of limb (b) workers who need an item of PPE, find the cost of it, estimate how frequently it will need to be re-purchased (for example, because of damage), and repeat for all of the most common items of PPE.
  - By sector: find the percentage of limb (b) workers in a sector, cost a standard combination of PPE for that sector, estimate how frequently that PPE would need to be replaced, and repeat for all major affected sectors.
67. To facilitate the item approach, HSE gathered information from a variety of sources:
- HSE collected data from members of the British Safety Industry Federation on retail pricing of PPE.
  - HSE used the first YouGov survey described in paragraph 35 to gather information on the items of PPE needed by limb (b) workers; only eight limb (b) workers shared the items of non-COVID-19 PPE that they require.
  - HSE also used the first YouGov survey to collect data on how frequently different items of PPE are replaced. Data collected here was of a very poor quality, with respondents often giving one estimate of frequency for vastly different items of PPE.
68. To facilitate the sector approach, HSE gathered further data:
- HSE used the first YouGov survey to collect data on the sectors where limb (b) workers are found. The quality of data achieved here was poor, with the majority of limb (b) workers not identifying with any of the sectors presented to them.
69. Given clear gaps in the evidence base to cost PPE provision through this bottom-up approach, HSE attempted to collect further data at consultation. As part of the public consultation, we asked about items of PPE typically worn by limb (b) workers, the price and frequency of replacement of that PPE, and the sectors that limb (b) workers work in using a more comprehensive list of options. Data collected here was deemed insufficient by analysts to provide even an indicative estimate of costs using the bottom-up approach described in paragraph 66.
70. As an alternative, and estimated alongside the attempts at the bottom-up approach, HSE analysts attempted a more simplistic ‘top-down’ approach to costing PPE for which much better quality evidence has been obtained. This top-down approach is to find an average

<sup>19</sup> PPER Amendment Consultation Stage IA ([hse.gov.uk](https://www.hse.gov.uk))

yearly cost of providing PPE for a limb (b) worker – across all sectors and all combinations of PPE.

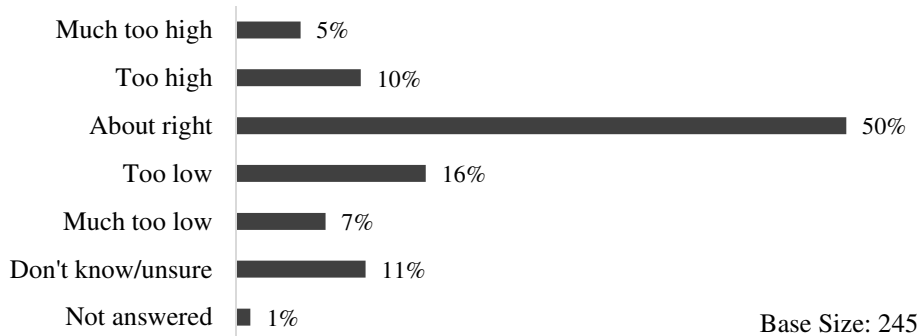
71. As part of the top-down approach, the first YouGov survey asked respondents: “Approximately, how much did you have to pay for your Personal Protective Equipment (PPE) per month?”. This question was answered by only three limb (b) workers, so we analysed responses from a broader group: those who identified as being in ‘casual/ irregular work’. After excluding outliers and responses that were out of scope for discussing COVID-19 PPE, 27 people in casual/ irregular work responded to the question, with an average cost of PPE of £284 per individual per year.

72. This estimate was tested at public consultation, where stakeholders were asked:

“We estimate that, on average, the cost of purchasing PPE per worker in GB may be around £284.00 per year or £24.00 per month (figures do not sum due to rounding). Do you think this estimate is – Please choose one:”

73. Responses to this question are summarised in Table 3: Average cost of PPE

**Table 3: Average cost of PPE consultation responses**



74. Approximately 50% of respondents said that £284 was ‘about right’, with a fairly even distribution of respondents thinking the estimate was too high or too low; however, slightly more respondents suggested the estimate was too low rather than too high.

75. In parallel to the public consultation, HSE commissioned a third YouGov survey of businesses, as described in sections B and F. As part of this survey, we asked businesses “What is the typical annual cost per worker of the PPE you supply to limb (b) workers?”. After excluding outliers assessed to be unreasonable or unrepresentative based on HSE expert judgement, the question received 279 responses with an average response of £300.

76. Based on the evidence presented, we assume an average cost of PPE per limb (b) worker per year of between £284 and £300, with a midpoint ‘best’ estimate of £292. To illustrate the types of PPE that may constitute this average cost, the most commonly cited items of PPE from the first YouGov survey were safety boots, gloves, and safety helmets; and from the public consultation were gloves, safety boots and high-visibility jackets.

77. Applying this average cost per worker per year to the number of limb (b) workers who will require additional PPE under Option 2 (calculated in Table 2) gives costs to organisations presented in Table 4. These costs give a net present value of costs to organisations over the appraisal period of between £87m and £572m, with a best estimate of £304m.

**Table 4: Cost to organisations of purchasing PPE**

	Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Cost to organisations of purchasing PPE	Low	£8m	£8m	£9m	£9m	£10m	£10m	£11m	£12m	£12m	£13m
	Best	£28m	£30m	£31m	£33m	£35m	£36m	£38m	£40m	£42m	£45m
	High	£53m	£56m	£59m	£62m	£65m	£68m	£72m	£76m	£80m	£84m

### G.2.1.d The number of affected organisations

78. To calculate other additional costs to organisations under Option 2, it is necessary to calculate the number of organisations that will have additional duties under Option 2.
79. Firstly, only organisations that hire limb (b) workers that need PPE will incur additional duties. Secondly, as discussed in paragraph 53, some organisations may already provide PPE to their workers under the baseline scenario. Employers might be providing PPE free of charge to limb (b) workers for a variety of reasons, which may include that employers struggle to differentiate limb (b) workers from employees, or that employers do not differentiate between employees and limb (b) workers in regards to health and safety in the workplace. We assume that these employers, given that they do not distinguish between employees and limb (b) workers in the provision of PPE, also adhere to other requirements of the PPER amendments under the baseline scenario. Hence, only organisations that hire limb (b) workers that need PPE and don't provide them with it under the baseline scenario (hereafter referred to as 'in-scope organisations') will incur additional duties such as assessing the suitability of PPE for limb (b) workers.
80. As explained in paragraph 17, HSE commissioned a survey of senior decision makers in organisations in GB (the second YouGov survey), in part to provide information about the organisations that hire limb (b) workers. Since the undertaking of this survey, HSE further refined its understanding of how to identify a limb (b) worker and assessed that questions asked here were insufficient to provide even indicative estimates of the population of organisations that hire limb (b) workers.
81. Therefore, HSE commissioned a third YouGov survey, asking businesses about whether they hire limb (b) workers, and if so whether they need PPE and whether the businesses provide it. Based on analysis of this data and extrapolation to the whole GB economy using BEIS business population estimates<sup>20</sup> and user-requested data from the ONS<sup>21</sup>, analysts estimate a population of in-scope organisations of between 45 thousand and 57 thousand with a best estimate of 51 thousand.

### G.2.1.e The additional cost of assessing suitability

82. As explained in paragraph 28, there will be an additional requirement for some organisations to assess whether the PPE is suitable for a task. An example of suitability could be whether the PPE complies with a particular British or international standard.
83. This must be performed once for each item of PPE provided by an organisation for a particular role. That is to say, should an organisation have 10 workers each requiring the same item of

<sup>20</sup> [Business population estimates 2020 - GOV.UK \(www.gov.uk\)](https://www.gov.uk/business-population-estimates-2020)

<sup>21</sup> [Enterprises by Broad Industry and employee size - Office for National Statistics \(ons.gov.uk\)](https://ons.gov.uk/enterprises-by-broad-industry-and-employee-size)

PPE and performing the same role, the organisation would have to assess the suitability of this item once for the role, rather than individually for each of the 10 workers.

84. To estimate the cost of this additional requirement for organisations requires the following parameters in the first year of the appraisal period:
- The number of in-scope organisations
  - Of these organisations, the proportion that will need to undertake additional suitability assessments as a result of the new requirement
  - The average number of items of PPE required to be suitability-assessed per organisation
  - The amount of time it takes to conduct a suitability assessment
  - The opportunity cost of time for those conducting suitability assessments
85. And then for ongoing annual costs:
- How often suitability assessments must be repeated
  - How many new organisations are set up in GB each year that are required to undertake suitability assessments under the PPER changes and would not have had to do so otherwise.

#### The first year of the appraisal period

86. As described in paragraph 81, we estimate the number of in-scope organisations in the first year of the appraisal period to be between 45 thousand and 57 thousand with a best estimate of 51 thousand. As explained in paragraph 83, organisations must assess the suitability of PPE for job roles rather than individually for each employee. Therefore, if any in-scope organisations already have employees performing the same role as their limb (b) workers, suitability assessments are not an additional requirement of this amendment, as the organisation would already be required to assess the suitability of PPE for the role for their employees.
87. As part of the public consultation, we asked questions to try to estimate the proportion of in-scope organisations needing to undertake additional suitability assessments. We asked businesses, workers and their representatives if limb (b) workers work alongside employees on the same tasks. Based on analysis of responses to this question, analysts estimate that around 71% of in-scope organisations have employees working alongside their limb (b) workers on the same tasks, and will already be required to assess suitability of PPE for their employees under the baseline scenario.<sup>22</sup>
88. This leaves approximately 29% of in-scope organisations that will have an additional requirement to assess the suitability of PPE for their limb (b) workers – a low estimate of 13 thousand, a high estimate of 17 thousand, and a best estimate of 15 thousand in the first year of the appraisal period.
89. From HSE expert opinion, triangulated with calculations from the second YouGov survey, it is estimated that on average, limb(b) workers in organisations will require 3.5 items of PPE. As discussed in paragraph 83 suitability assessments will be conducted per role, but it is not clear from survey data how many roles limb (b) workers might be fulfilling per in-scope organisation. Given that there are a best estimate of around 51 thousand in-scope organisations (see paragraph 81) and a best estimate of around 97 thousand limb (b) workers who require PPE, but do not receive it (see paragraph 61), we might estimate that the average number of such limb (b) workers per in-scope organisation is around two. Some in-scope organisation will have many more than this, but most will have fewer (i.e., just one). While it would be an overestimate for most organisations, we might assume that each business on average would

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<sup>22</sup> We acknowledge that this assumption is based on unrepresentative consultation data, however total costs are not very sensitive to this assumption, hence we think it is disproportionate to conduct further research into this parameter.

have two roles for which to suitability assess PPE. Therefore, these organisations will each have to do seven suitability assessments, on average.

90. HSE experts initially estimated that each suitability assessment would take, on average, 30 minutes. This assumption was tested at consultation, asking stakeholders their opinion of the estimate and to provide alternative estimates. Many consultees suggested the estimate was too low, and based on analysis of their alternative suggestions, we increase our initial assumption of 30 minutes to 2.5 hours per suitability assessment. This would include the time necessary to purchase the PPE.
91. In order to estimate the cost of this time spent for organisations, opportunity cost of the time of the individuals carrying out these suitability assessments needed to be estimated – that is, the value of what they could do instead of spending time assessing suitability. It is assumed that the productivity of the person(s) carrying out duties related to the PPER amendments is best reflected by the cost of employing that person (they create as much value as employers pay to employ them).
92. It is estimated that the full economic cost of employing an individual is their gross hourly wage, uprated by 19.8%<sup>23</sup> to reflect the non-wage costs of employment (such as employer tax and National Insurance contributions and employer contributions to pension). At consultation, businesses and representative organisations of business were asked who would carry out these suitability assessments, and the vast majority suggested either a Health and Safety Officer, or a Manager, Director, or Senior official.
93. The Annual Survey of Hours and Earnings<sup>24</sup> states that the gross median hourly wage for a Health and Safety Officer is approximately £17.30, and the gross median hourly wage for a Manager, Director, or Senior official is approximately £21.90. Taking a midpoint and uprating by 19.8% gives £23.47. We assume this to be the average full economic hourly cost of time for organisations carrying out suitability assessments.
94. To estimate the total cost of suitability assessments in the first year of the appraisal period, we take a low estimate of 13 thousand, a high estimate of 17 thousand, and a best estimate of 15 thousand organisations conducting an average of seven suitability assessments each, at 2.5 hours per suitability assessment and a cost of time of £23.47. This gives a low estimate of £5.5 million, a high estimate of £6.9 million and a best estimate of £6.2m in costs to organisations in the first year of the appraisal period. The average cost per in-scope organisation is around £410.

#### Ongoing suitability assessment costs

95. There are two sources of ongoing costs:
  - New organisations being set up in GB that are required to undertake suitability assessments under the PPER amendments and would not have had to do so under the baseline scenario.
  - Existing organisations reassessing suitability of PPE
96. Each year, new organisations are set up in GB. Some of these, under the baseline scenario, would have hired limb (b) workers and not provided them with PPE, making them ‘in-scope organisations’. Using ONS data<sup>25</sup> on business births, we estimate the rate at which new businesses are set up (that is – the number of businesses set up as a proportion of total businesses the previous year) in Table 5 below:

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<sup>23</sup> The most recent Eurostat data suggests that non-wage costs are typically 16.5% of total unit labour costs. These are then divided by the proportion of total labour costs made up of wages to estimate non-wage costs as a proportion of gross wages, equivalent to 19.8% ( $16.5 \times (100 / (100 - 16.5))$ ).

<sup>24</sup> Earnings and hours worked, occupation by four-digit SOC: ASHE Table 14 - Office for National Statistics (ons.gov.uk); 2020 provisional edition; Table 14.5a

<sup>25</sup> ONS Business demography 2019 Table 1.1b&c; Table 3.1b&c Business demography, UK - Office for National Statistics (ons.gov.uk)

**Table 5: Businesses births**

	2015	2016	2017	2018	2019
Active enterprises in GB	2,615,640	2,775,485	2,856,880	2,854,490	2,926,505
Business births in GB	377,315	407,965	368,755	364,265	383,605
Business birth rate		15.6%	13.3%	12.8%	13.4%
<b>Average business birth rate</b>	<b>13.8%</b>				

97. Assuming that new in-scope organisations are born at the same ‘rate’ as businesses in the aggregate economy (13.8%), there would be between around 6.2 thousand and 7.9 thousand with a best estimate of around 7.1 thousand new in scope organisations in the economy each year. As explained in paragraphs 86 and 87, not all of these organisations will have additional suitability assessment requirements – some may have employees performing the same role as limb (b) workers and hence would have been required to undertake suitability assessments under the baseline scenario. As discussed in paragraph 88, we assume that approximately 29% of these new organisations will not have employees working alongside limb (b) workers and hence will have to carry out additional suitability assessments. This gives an estimate of between 1.8 thousand and 2.3 thousand with a best estimate of 2.1 thousand new organisations who need to carry out additional suitability assessments each year.
98. There are further organisations with additional suitability assessment requirements beyond the first year of the appraisal period, as existing organisations have to reassess the suitability of PPE after a certain period of time. This may be, for example, due to a change in safety standards, a change to the way limb (b) workers go about their work, or the PPE which is currently being bought ceasing to be available. HSE expert opinion is that suitability of PPE may need to be reassessed by organisations every 5 years, on average. Taking this assumption, together with the in-scope organisation births calculated in paragraph 97 leads to a number of organisations with additional suitability assessment duties in each year of the appraisal period seen in Table 6. As can be seen, years 2023-2026 of the appraisal period have only new organisations assessing suitability, year 2027 has new organisations and all organisations from year 2022 of the appraisal period (calculated in paragraph 88) reassessing suitability, and years 2028-2031 have new organisations assessing suitability and organisations born in years 2023-2026 reassessing suitability.<sup>26</sup>

**Table 6: Number of organisations with additional suitability assessment requirements over time**

	Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
<b>Number of organisations with additional suitability assessment requirements (thousands)</b>	Low		1.8	1.8	1.8	1.8	15.1	3.7	3.7	3.7	3.7
	Best		2.1	2.1	2.1	2.1	17.2	4.2	4.2	4.2	4.2
	High		2.3	2.3	2.3	2.3	19.2	4.6	4.6	4.6	4.6

Note: totals may appear not to sum due to rounding

99. As set out in paragraph 94, the average cost per organisation with additional suitability assessment requirements is around £410. This gives total ongoing costs set out in Table 7 below.

<sup>26</sup> We acknowledge that some organisations are likely to cease to exist before needing to reassess suitability, hence these figures are likely to be an overestimate. These ongoing costs are small in comparison to other costs in this IA hence on grounds of proportionality we do not introduce business deaths into our analysis.

**Table 7: Cost of Suitability Assessments**

	Year	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Cost of suitability assessments	Low		£0.75m	£0.75m	£0.75m	£0.75m	£6.21m	£1.50m	£1.50m	£1.50m	£1.50m
	Best		£0.85m	£0.85m	£0.85m	£0.85m	£7.05m	£1.71m	£1.71m	£1.71m	£1.71m
	High		£0.95m	£0.95m	£0.95m	£0.95m	£7.89m	£1.91m	£1.91m	£1.91m	£1.91m

Note: totals may appear not to sum due to rounding

100. These costs give a net present value of ongoing suitability assessment costs of between around £12.6m and £16.1m with a best estimate of £14.3m.

Total suitability assessment costs

101. Taking ongoing costs together with costs in the first year of the appraisal period gives a net present value of suitability assessment costs between £18.1m and £23.0m with a best estimate of £20.5m.

**G.2.1.f Other costs**

102. There are other additional requirements placed on organisations under Option 2 beyond those already explored. These are set out in paragraph 40 (iv - vii).
103. One requirement is that employers will need to ensure that the PPE they provide to limb (b) workers is maintained and cleaned. The costs associated with maintenance and cleaning will depend on the type of PPE that limb (b) workers require. The first YouGov survey asked casual workers and identified limb (b) workers about how their PPE was cleaned and maintained. Initial analysis of results from this survey suggested minimal cleaning costs for a typical worker, and that PPE was often ‘maintained’ by replacing it – hence some of these costs will be accounted for in section G.2.1.c, which includes costs of replacing PPE. This evidence was triangulated with HSE experts who agreed that, for a typical worker, cleaning and maintenance costs would be minimal compared to the cost of purchasing PPE.
104. We tested this reasoning at consultation, asking stakeholders whether they agreed or disagreed with the statement: *“We estimate that, in the average case, the cost of cleaning and maintaining PPE is minimal compared to the cost of purchasing PPE”*. The majority of respondents agreed or strongly agreed with the statement. Based on this, it was deemed disproportionate to analyse these costs in detail, though we attempt to provide an indicative estimate of these costs in paragraph 108.
105. Another additional requirement is that employers will need to provide storage for any PPE provided to their limb (b) workers when it is not being used. The first YouGov survey asked casual workers and identified limb (b) workers about how their PPE was stored. Initial analysis of responses suggested minimal storage costs compared to the cost of purchasing PPE. This evidence was triangulated with HSE sector experts who agreed that additional storage costs would be minimal compared to the cost of purchasing PPE. Based on this, analysts deemed it disproportionate to attempt to gather further information on the potential costs of this requirement, though we attempt to provide an indicative estimate of these costs in paragraph 108.
106. Another additional requirement is that employers must ensure that appropriate information, instruction and training relating to PPE is provided to limb (b) workers, and ensure any PPE provided to their limb (b) workers is properly used. Internal HSE sector expert opinion was that costs relating to this requirement would again be minimal compared to the cost of purchasing PPE. We tested this reasoning at consultation, asking stakeholders whether they agreed or disagreed with the statement: *“We estimate that, in most cases, the cost of training limb (b) workers in the proper use of PPE and/or then checking that they are using it properly will be minimal compared to the cost of purchasing that PPE”*. The majority of respondents agreed or strongly agreed with the statement. Based on this, it was deemed disproportionate to analyse these costs in detail, though we attempt to provide an indicative estimate of these costs in paragraph 108.

107. A further potential additional cost of Option 2 was raised during the public consultation and relates to the practicalities of providing PPE free of charge to limb (b) workers. Under the baseline scenario, limb (b) workers that are not provided with PPE by their employer would 'manage' their own PPE – e.g. bring their own PPE to and from work. Under Option 2, some organisations may need to spend resources 'managing' the PPE they provide for limb (b) workers. This could include the practicalities of administering PPE to workers and ensuring that reusable PPE is returned to the organisation at the end of a shift or job. This potential cost would require a significant amount of analytical resource to collect evidence on and analyse in detail as the burden will vary significantly depending on the type of PPE used and the size and nature of the organisation. We instead attempt to provide an indicative estimate of these costs in paragraph 108.
108. As already discussed, it was deemed disproportionate to provide detailed cost estimates for the additional requirements discussed in this section. As set out in Section B, the purpose of this IA is to provide indicative estimates of costs and benefits. Analysts did not wish to underestimate costs by not exploring these additional requirements in detail and so considered a general percentage uplift to provide an indicative estimate of these costs. Following analysis of consultation responses and discussion with HSE sector experts, we estimate that the requirements discussed in this section, taken together, would cost 15% of the additional cost of purchasing PPE for limb (b) workers on average. For illustrative purposes, this would imply a cost of around £130 per annum for an organisation that employs three limb (b) workers (and doesn't already provide them with adequate PPE under the baseline scenario), or a cost of around £44 thousand per annum for an organisation that employs 1000 limb (b) workers (and doesn't provide them with adequate PPE under the baseline scenario).
109. This assumption gives a net present value of these additional costs over the appraisal period of between £13m and £86m, with a best estimate of £46m.

## **G.2.2 Familiarisation costs**

110. When the PPER are amended in the first year of the appraisal period, some organisations will need to spend time understanding what the change means for them, constituting an additional cost to organisations.
111. As discussed in paragraph 79, we assume that organisations who provide adequate PPE to their limb (b) workers do not distinguish between employees and limb (b) workers when adhering to the PPER in the baseline scenario. It is therefore expected that these organisations will not need to familiarise with the changes in anything but minimal detail to find that the change does not impact them.
112. Analysts therefore assess familiarisation costs for organisations that have limb (b) workers but do not provide them with adequate PPE under the baseline scenario. The population of these organisations is estimated in paragraph 81 to be between 45 thousand and 57 thousand with a best estimate of 51 thousand.
113. HSE experts estimated that it would take approximately one hour for organisations to familiarise with the proposed amendment and supplementary guidance. This estimate was tested at the public consultation where stakeholders were asked whether they thought this estimate was too low, too high, or about right. The majority of respondents thought that the estimate was about right. Therefore, we assume that it will take an average of one hour per organisation to familiarise with the proposed amendment.
114. At consultation, businesses and representative organisations of business were asked who would read and understand the proposed amendment and supplementary guidance, and the vast majority suggested either a Health and Safety Officer, or a Manager, Director, or Senior official. The midpoint full economic cost of time of these professions was estimated in paragraph 93 as £23.47.
115. This gives one-off familiarisation costs in the first year of the appraisal period of between £1.1m and £1.3m with a best estimate of £1.2m.



116. Analysts anticipate no additional familiarisation costs for new organisations over the appraisal period, as we assume that any new organisation that undertakes work which requires PPE would do some amount of familiarisation with the PPER before commencing work under the baseline scenario.

### **G.2.3 Enforcement costs**

117. HSE operates a Fee for Intervention Fee (FFI) system and any breaches identified during HSE inspection would fall within this scheme. Therefore, enforcement costs would be recovered from non-compliant organisations. It is not possible to predict the rate of non-compliance; or the rate of detection by HSE.

### **G.2.4 Benefits**

#### Provision of PPE free of charge

118. Under Option 2, employers will be required to provide limb (b) workers with suitable PPE free of charge. As was the case in section G.2.1 and G.2.2 for additional costs to organisations, limb (b) workers who will incur additional benefits from this amendment are those who need PPE and don't get all of it provided by the organisation they work for. The population of these limb (b) workers in GB is estimated in section G.2.1.b, and is summarised in Table 2.
119. There are two core ways in which these workers may benefit from this requirement.
120. Firstly, where the limb (b) workers wear adequate PPE under the baseline scenario, the amendment will effectively shift the cost of purchasing PPE away from limb (b) workers onto employers<sup>27</sup>.
121. Secondly, where the limb (b) workers do not wear adequate PPE under the baseline scenario, the result of the amendment to legislate the provision of PPE to limb (b) workers may be to improve health and safety outcomes. This would be a benefit to the limb (b) workers themselves and also wider society (for example, through reduced costs to the National Health Service). Estimating a monetised benefit to society of these improved health and safety outcomes would require considerable analytical resource.
122. As outlined in paragraph 10, a decision to amend the PPER has already been made and is not for consideration for the purposes of this IA. Hence on grounds of proportionality we assume that the benefits of free PPE provision are equal to the cost of PPE provided.
123. Hence our estimate of the benefits to limb (b) workers of the provision of PPE, free of charge by employers is equal to our estimate of cost to organisations estimated in section G.2.1.c – a net present value of benefits of between £87m and £572m, with a best estimate of £304m.

#### Other additional impacts of the PPER Amendments

124. As set out in paragraph 40, the PPER amendment requires that employers assess the suitability of PPE provided to their limb (b) workers; maintain, store and clean the PPE; provide appropriate training and information relating to the PPE; and ensure that the PPE is properly used. Where limb (b) workers were carrying out these actions themselves under the baseline scenario, they may save time and money from the transfer of this responsibility. Where limb (b) workers were not carrying out these actions under the baseline scenario, there could be an improvement in health and safety outcomes for these workers as their employer will begin to carry them out.
125. During public consultation, stakeholders were asked: *“Are there any benefits related to the proposed amendment to give limb (b) workers the same rights to PPE at work as employees?”*.

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<sup>27</sup> The amount spent purchasing PPE by these workers under the baseline scenario may be more than or less than the additional cost to businesses of purchasing PPE for them under option 2. On grounds of proportionality, we assume that the cost-saving benefit to workers is equal to the cost burden on businesses of purchasing PPE.

Of 245 stakeholders who responded to the consultation, 67% answered 'yes', 15% answered 'no', and the remainder did not know or did not answer. Of 153 stakeholders who provided further comment, the most frequently cited benefit (cited by 73 respondents) was increased protection/ safety for limb (b) workers. These benefits may somewhat be captured in the monetised benefit in paragraph 123. They may also refer to the health and safety benefits suggested in paragraph 124. As argued in paragraph 121, estimating a monetised benefit to society of these improved health and safety outcomes would require considerable analytical resource and we deem this disproportionate for this IA. We do, however, acknowledge that there may be health and safety benefits in addition to benefits estimated in paragraph 123.

126. Paragraph 124 suggest two other possible additional benefits: time savings and cost savings for limb (b) workers. Collecting evidence on these potential benefits and subsequently analysing them in detail would require a large amount of analytical resource, would be subject to a considerable amount of uncertainty, and is considered disproportionate for the purposes of this IA.
127. In section G.2.1.f, to acknowledge potential costs that were deemed disproportionate to analyse in detail (including many of the additional duties described in paragraph 124), a 15% uplift to the cost of purchasing PPE was applied. Following similar logic, to acknowledge the likely additional benefits described in this section, a 15% uplift is applied to the benefits estimated in paragraph 123. This approach may be more likely to underestimate the net present value to society rather than to overestimate it, as businesses may be able to perform some duties for multiple limb (b) workers at once at a lower per-head cost than if those workers were to perform the duties themselves.
128. This gives an additional benefit of Option 2 with a net present value of between £13m and £86m with a best estimate of £46m, which mirrors the costs to employers estimated in paragraph 109.

## **G.2.5 Summary of costs and benefits**

129. Monetised costs and benefits of Option 2 are summarised in Table 8 below.

*Table 8: Summary of costs and benefits*

		Net Present Value to Society	Net Present Value of Benefits to Workers	Net Present Value of Costs to Business
Provision of PPE	Low	£nil	£87.0 m	£87.0 m
	Best	£nil	£304.3 m	£304.3 m
	High	£nil	£572.4 m	£572.4 m
Familiarisation	Low	-£1.3 m	£nil	£1.1 m
	Best	-£1.2 m	£nil	£1.2 m
	High	-£1.1 m	£nil	£1.3 m
Suitability Assessments	Low	-£23.0 m	£nil	£18.1 m
	Best	-£20.5 m	£nil	£20.5 m
	High	-£18.1 m	£nil	£23.0 m
Uplift for other impacts	Low	£nil	£13.1 m	£13.1 m
	Best	£nil	£45.6 m	£45.6 m
	High	£nil	£85.9 m	£85.9 m
<b>Total</b>	<b>Low</b>	<b>-£24.3 m</b>	<b>£100.1 m</b>	<b>£119.2 m</b>
	<b>Best</b>	<b>-£21.7 m</b>	<b>£349.9 m</b>	<b>£371.6 m</b>
	<b>High</b>	<b>-£19.2 m</b>	<b>£658.2 m</b>	<b>£682.6 m</b>

Note: totals may appear not to sum due to rounding

## G.5 Direct costs and benefits to business

130. Evidence from the first YouGov survey (based on a low sample size), showed that all limb (b) workers who were identified as working in the public sector and requiring PPE were provided with that PPE. Public sector employment is around 16.7% of total employment<sup>28</sup> and the majority of areas of public sector work (e.g. public administration and education) should not require PPE provision for the most part. The largest exception might be the NHS, which accounts for around 32% of public sector employment<sup>29</sup>, or around 5.3% of total employment; in practice, some of the PPE provision in the NHS will be excluded from PPER under the COSHH exclusion discussed in paragraph 138. In the face of some uncertainty and with some (albeit limited) evidence that public sector organisations will not incur additional costs as a result of the change, it is deemed disproportionate to provide a specific estimate of costs to the public sector.
131. As such, while we acknowledge that some costs could be borne by the public sector, we expect they will be small and will not attempt to quantify them here. To overestimate rather than underestimate costs to businesses, we assume that all costs estimated in sections G.2.1 and G.2.2 accrue to businesses.
132. All costs estimated in these sections are 'direct costs' as they arise directly from businesses adhering to the additional requirements set out in Section D.

<sup>28</sup> Public sector employment by parliamentary constituency

<sup>29</sup> Ibid

133. This gives a net present value of direct costs to businesses of between £119m and £683m with a best estimate of £372m; and an EANDCB of between £14m and £79m with a best estimate of £43m.
134. This amendment is a non-qualifying regulatory provision, and hence is not counted in the Business Impact Target (BIT) as it relates to a new or changed European Union obligation. The current (March 2020) Better Regulation Framework guidance<sup>30</sup> states that:

*“Changes required to address previous under implementation (e.g. in the context of infraction proceedings, or a court decision) would also fall within the exclusion [from the BIT], as these still relate to implementation of the new or changed EU obligation”.*

135. This amendment addresses previous under-implementation following a court judgment; hence it is excluded from the BIT as a non-qualifying regulatory provision.

## G.6 Risks and assumptions

136. Many core assumptions (and the rationale/ evidence-base that sits behind them) are presented throughout this IA. Many of these assumptions are subject to uncertainty due to data collection methodologies, interpretation of survey questions by respondents, and subsequent analysis of data by HSE analysts. This risk has been mitigated as far as is deemed proportionate by HSE analysts through the use of ranges in many assumptions, triangulation of assumptions using a variety of sources of information, and analysts erring towards overestimating costs/ underestimating benefits when analysing data and estimating impacts.
137. There are further risks and overarching assumptions of the analysis, which this section will discuss in more detail.
138. **Some PPE provision is out of scope of this amendment.** PPE that is required to reduce risks arising from: lead exposure, ionising radiation, asbestos, noise, substances hazardous to health (for example: chemicals, fumes, dusts, non-water vapours, nanotechnology, and/or gases), is regulated and enforced under regulations other than the PPER<sup>31</sup>. These types of PPE are excluded from PPER and hence are out of scope of this amendment.
139. As discussed in paragraphs 55 and 56, analysts used the first YouGov survey to ask workers whether or not they required PPE to carry out their working duties, and use their responses to estimate the percentage of limb (b) workers that require PPE. HSE social researchers’ opinion was that to include detail about in- and out-of-scope PPE would confuse respondents and/ or negatively impact response rates, in turn potentially leading to an underestimate of the percentage of limb (b) workers that require (in-scope) PPE. To manage this risk, HSE asked about all (pre-COVID-19) PPE in order to err towards overestimating the costs of this amendment rather than risk underestimating them.
140. As discussed in paragraph 81, HSE commissioned another YouGov survey (‘the third YouGov survey’), asking businesses about whether they hire limb (b) workers, and if so whether they require PPE, in order to estimate the number of businesses affected by this amendment. Following the same rationale set out above, respondents were asked about all (pre-COVID-19) PPE, to err towards overestimating the costs of this amendment rather than risk underestimating them.
141. As discussed in paragraph 71, HSE used the first YouGov survey to ask workers about the cost of their PPE. Again, this question asked about all (pre-COVID) PPE. This may lead to the initial estimate of the average cost of in-scope PPE to be an overestimate or an underestimate (as out-of-scope PPE could be either more expensive or less expensive than in-scope PPE). Analysts attempted to mitigate this risk using the public consultation. Stakeholders responding

<sup>30</sup> Available at: [The Better Regulation Framework \(publishing.service.gov.uk\)](https://publishing.service.gov.uk)

<sup>31</sup> See: [The Control of Lead at Work Regulations 1998](#), [The Ionising Radiations Regulations 2017](#), [Control of Asbestos Regulations 2012](#), [The Control of Substances Hazardous to Health Regulations 2002](#), and [The Control of Noise at Work Regulations 2005](#) for further information

to the public consultation were deemed to be more engaged in the subject matter than respondents to the YouGov surveys, and so were given details of out-of-scope PPE before being asked about the average cost of PPE. As discussed in section G.2.1.c, these consultees somewhat verified the initial estimate of the cost of PPE, and analysts used the initial estimate as a lower bound in a range approach to account for some respondents who suggested the estimate was too low.

142. **This analysis assumes that current data on limb (b) workers and the organisations that hire them is an adequate reflection of the future.** Analysts assume that the number of limb (b) workers hired in roles that require PPE will not be impacted by the PPER amendment (and will in fact grow over the appraisal period as modelled in Table 2). The possibility of the PPER amendment leading to organisations hiring fewer limb (b) workers was tested at public consultation. Of 48 respondents to this question, only 13% said they would employ fewer limb (b) workers. Given this evidence and the purpose of this IA being to provide an indicative estimate of costs and benefits, it was deemed disproportionate to analyse this risk in further detail. We acknowledge that some organisations might hire fewer limb (b) workers in roles that required PPE, and this may mean that cost (and benefit) estimates in this IA are overestimates rather than underestimates.
143. This analysis also does not attempt to model changes in the need for or provision of PPE for limb (b) workers due to technological, sociological or other changes in labour market conditions over the next ten years.
144. As set out in paragraph 43, **this IA assumes 100% compliance with the law now and after the change.** This is in-line with Better Regulation Framework guidance where we do not have compelling evidence that compliance will be less than 100%. The assumption of 100% compliance means that this IA captures the impact of changes in legal requirements, and not the costs (or avoidance of costs) arising from non-compliance with the law.
145. **This IA does not assume changes in the use of PPE.** PPE should only be provided once all other options to prevent exposure to the hazard have been taken, and to control the residual risk. As described in the COSHH hierarchy of control<sup>32</sup>, these prior options could include: elimination of the hazardous substance or hazardous task; modification of the substance, process and/or workplace; applying controls to the process, such as enclosures or local exhaust ventilation LEV; and ways of working that minimise exposure. PPE should only be a last resort.
146. Under Option 2, some organisations may explore these other options, should they reassess their exposure or costs of PPE provision and exposure-control. In this IA, it is assumed that where PPE was previously assessed to be necessary to control risk for limb (b) workers, it will continue to be necessary following the amendment on grounds of proportionality. This means that costs to organisations may be overestimated in this IA rather than underestimated.

## G.6.1 Time Horizon

147. Analysts have selected a default timeline of 10 years for modelling this IA. The transfer of PPE costs from limb (b) workers to employers should produce a long-term social welfare impact and consideration of the appropriate time horizon must be made. Time horizons of 30 years or greater are justified where assets impacted have long duration such as the construction of a bridge or when impacts are experienced in the future such as the catastrophic risks of climate change. PPE does not fall into either of these two categories as PPE is not highly durable and replacement is relatively frequent.
148. Given this regulation has permanent impact with relatively short duration effects there is not a strong argument to use a long or short duration time. Therefore, a default time horizon of 10 years has been selected.

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<sup>32</sup> [Principles of good control practice - COSHH \(hse.gov.uk\)](https://www.hse.gov.uk/pract/principles.htm)

## G.7 Summary of consultation responses

149. A full consultation response summary is available on the HSE Consultation Hub<sup>33</sup>. The overall response to the consultation was positive, with the majority of respondents stating there will be benefits in amending the current regulations, including equal rights for employees and limb (b) workers and increased health and safety protections through standardised PPE provision for limb (b) workers. A small number of concerns were raised during the consultation which included issues in relation to the practical implications of the amendments to the PPER, the quality and standard of PPE being lowered as more of the workforce will require PPE from employers, and also understanding where PPE duties lie where agencies are supplying temporary workers to businesses.

## H. Impact on small and micro businesses

150. Using data from the third YouGov survey, BEIS business population estimates<sup>34</sup> and user-requested data from the ONS<sup>35</sup>, analysts estimated the number of limb (b) workers in GB by business size group<sup>36</sup>. These estimates are presented in Table 9 below:

*Table 9: Limb (b) worker population by business size*

<b>Business Size</b>	<b>Limb (b) worker population</b>	<b>Proportion of total population</b>
<i>Micro (&lt;10 employees)</i>	0.60 m	25.5%
<i>Small (10-49 employees)</i>	0.35 m	15.0%
<i>Medium (50-249 employees)</i>	0.10 m	4.4%
<i>Large (250+ employees)</i>	1.30 m	55.1%
<b>Total</b>	<b>2.36 m</b>	<b>100%</b>

Note: totals may appear not to sum due to rounding

151. Costs under Option 2 of purchasing PPE (estimated in sections G.2.1.a – G.2.1.c), and ‘other’ costs (estimated in section G.2.1.f) are greater for businesses that hire more ‘affected’ limb (b) workers (i.e. limb (b) workers who are not provided with adequate PPE under the baseline scenario). Furthermore, suitability assessment costs (estimated in section G.2.1.e) may also be greater for businesses that hire more ‘affected’ limb (b) workers (as these businesses may be more likely to hire limb (b) workers across multiple roles and so will be required to conduct multiple suitability assessments).
152. There are reasons to doubt this assessment. For example, some costs could be subject to economies of scale or scope, such as bulk discounts on PPE purchases, which could lead to smaller businesses to have higher per-head costs than larger businesses. It has not been possible to proportionately measure this effect.
153. For the purpose of this analysis, it is assumed that the distribution of these costs between different business size groups is suitably well estimated by the distribution of the limb (b) worker population between these groups. There is a possibility that the proportion of the limb (b) worker population that is ‘affected’ may vary by business size group, meaning that the distribution of costs would not be well estimated by the distribution of the limb(b) worker population. This possibility has been explored through further analysis of the third YouGov survey, and no significant variation was found.

<sup>33</sup> [HSE response to amendments to the Personal Protective Equipment at Work Regulations 1992 Consultation](#)

<sup>34</sup> [Business population estimates 2020 - GOV.UK \(www.gov.uk\)](#)

<sup>35</sup> [Enterprises by Broad Industry and employee size - Office for National Statistics \(ons.gov.uk\)](#)

<sup>36</sup> As discussed in paragraph 49, estimates of the limb (b) population using the third YouGov survey are subject to a number of uncertainties.

154. Table 9 shows that 40.5% of the estimated population of limb (b) workers work for small and micro businesses. Analysts therefore estimate that small and micro businesses incur 40.5% of costs described in paragraph 151; these costs are summarised in Table 10 below.

**Table 10: Non-familiarisation costs to small and micro businesses**

		<b>Net Present Value of Costs to small and micro businesses</b>	<b>Small and micro businesses EANDCB</b>
Cost of purchasing PPE	Low	£35.3 m	£4.1 m
	Best	£123.3 m	£14.3 m
	High	£232.0 m	£27.0 m
Suitability Assessments	Low	£7.3 m	£0.9 m
	Best	£8.3 m	£1.0 m
	High	£9.3 m	£1.1 m
Uplift for other costs of administering PPE	Low	£5.3 m	£0.6 m
	Best	£18.5 m	£2.1 m
	High	£34.8 m	£4.0 m
<b>Total</b>	<b>Low</b>	<b>£47.9 m</b>	<b>£5.6 m</b>
	<b>Best</b>	<b>£150.2 m</b>	<b>£17.4 m</b>
	<b>High</b>	<b>£276.1 m</b>	<b>£32.1 m</b>

Note: totals may appear not to sum due to rounding

155. Familiarisation costs (estimated in section G.2.2) are proportional to the number of affected businesses, rather than the number of affected limb (b) workers in a business size group. Again, using data from the third YouGov survey, BEIS business population estimates and user-requested data from the ONS<sup>37</sup>, analysts estimate the number of affected businesses by business size group in Table 11 below<sup>38</sup>:

**Table 11: Affected businesses by size group**

<b>Business Size</b>	<b>Number of affected businesses</b>	<b>Proportion of total</b>
Micro (<10 employees)	42,000	81.1%
Small (10-49 employees)	7,100	13.8%
Medium (50-249 employees)	1,900	3.8%
Large (250+ employees)	700	1.4%
<b>Total</b>	<b>51,000</b>	<b>100%</b>

Note: totals may appear not to sum due to rounding

<sup>37</sup> [Enterprises by Broad Industry and employee size - Office for National Statistics \(ons.gov.uk\)](https://ons.gov.uk)

<sup>38</sup> As discussed in paragraph 49, estimates of the limb (b) population using the third YouGov survey are subject to a number of uncertainties.

156. Given that small and micro businesses make up 95% of all affected businesses, analysts estimate that 95% of familiarisation costs will fall on these businesses. These costs are summarised in Table 12 below:

**Table 12: Familiarisation costs to small and micro businesses**

		<b>Net Present Value of Costs to small and micro businesses</b>	<b>Small and micro businesses EANDCB</b>
Familiarisation	Low	£1.0 m	£0.12 m
	Best	£1.1 m	£0.13 m
	High	£1.3 m	£0.15 m

Note: totals may appear not to sum due to rounding

157. This gives a net present value of total costs to small and micro businesses of between £49m and £277m with a best estimate of £151m over the 10-year appraisal period, and an equivalent annual net direct cost to small and micro businesses of between £5.7m and £32.2m with a best estimate of £17.6m. Hence it is estimated that small and micro businesses will incur approximately 41% of total costs resulting from the PPER amendment.
158. Given that small and micro businesses account for 48% of employment and 36% of turnover in the UK private sector<sup>39</sup>, analysts deem that these businesses incurring 41% of costs resulting from the PPER amendment is a proportionate burden.
159. Exemption for small and micro businesses from the additional requirements of the PPER amendment would result in a large proportion of intended benefits for workers not being realised. Furthermore, exemption would mean that the PPER is not aligned with the court judgment described in paragraph 4, and hence is not explored further.
160. As discussed in section B, analysis in this impact assessment is not required to choose between different options, as a decision to align with the court judgment has already been made. Therefore, analysts attempted to make indicative estimates of costs falling on small and micro businesses. Analysts acknowledge that larger businesses may benefit from some economies of scale or scope compared to smaller businesses (for example, bulk-buying of PPE at discounted rates), but deem it disproportionate to analyse this possibility further given the purpose of this analysis.

## I. Wider impacts

161. In 2020/21, there were 142 fatal injuries to workers<sup>40</sup>, and 693 thousand workers sustained a non-fatal injury in the workplace<sup>41</sup>. Though not all injuries were related to PPE, as limb (b) workers will be entitled to the same level of PPE protections as employees, and it is expected the amendments will provide limb (b) workers who require PPE with a greater understanding and provision of safe working practices across a number of sectors, particularly those which see a high number of fatalities in the workplace reported annually such as construction, agriculture, forestry and fishing sector and manufacturing.
162. The total costs of workplace injuries and ill health in 2018/19 was £16.2 billion. Injuries at work made up 34% of this, with a total cost of £5.6 billion<sup>42</sup>. Although not all injuries are a result of PPE not being provided, or sub-standard PPE purchased by limb (b) workers, it is reasonable to

<sup>39</sup> Calculations based on [Business population estimates 2020 - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/statistics/business-population-estimates-2020)

<sup>40</sup> This includes employees, self-employed and other workers

<sup>41</sup> [Health and safety statistics \(hse.gov.uk\)](https://www.hse.gov.uk/statistics/health-and-safety-statistics)

<sup>42</sup> [Statistics - Costs to Britain of workplace injuries and new cases of work-related ill health \(hse.gov.uk\)](https://www.hse.gov.uk/statistics/costs-to-britain-of-workplace-injuries-and-new-cases-of-work-related-ill-health)



expect some reduction in the overall cost of injuries as more of the GB workforce will be provided with suitable PPE. These possible health and safety improvements are also discussed in Section G.2.4 under 'Benefits'.

163. The amendment to the PPER will also provide legal clarity for employers in respect of PPE and remove any ambiguity in regards to their duties towards limb (b) workers. Currently, there may be limb (b) workers who are purchasing their own PPE, which may be sub-standard, ill-fitting and not replaced at the appropriate time. It is possible there may be fewer claims due to injury/death against employers as they will be responsible for ensuring PPE provided is suitable, maintained and of the correct standard.
164. The amendments to the PPER may also encourage employers to review, assess and eliminate risks and hazards in the workplace which could reduce the need for PPE overall.

### **Possible unintended consequences**

165. During public consultation, the following question was asked to businesses: 'Will the proposed amendment to give limb (b) workers the same rights to PPE at work as employees affect the way you employ persons in the future?' and there were 48 responses. 50% of respondents said 'No', 21% said 'Yes', and 29% responded 'Don't know/Unsure'. Of all those who responded to the question, 13% said they would hire fewer limb (b) workers.
166. Other comments made by business and business representative respondents indicated they might find implementing new processes to comply with the amendments to be complex in practical terms, and so they may prefer to offer employee contracts only to streamline management processes or contract self-employed persons who provide their own PPE who are out of scope of the PPER. A small number of comments also suggested businesses may prefer to move limb (b) workers to roles that do not require PPE in order to comply with the amendments.

### **Public sector and equality impacts**

167. The PPER amendments have been assessed in regards to the public sector equality duty and it is not expected that the amendment will have negative impacts on those with protected characteristics. The assessment included the consideration of responses to the consultation question "Do you think the proposed amendment to give limb (b) workers the same rights to PPE at work as employees will have a particular negative impact on any persons with any of the following protected characteristics - race, disability, gender, age, religion/beliefs, sexual orientation, gender reassignment, pregnancy, maternity?". 82% stated that the changes would not have a negative effect on persons with a protected characteristic, and 6% stated it would have a negative effect, with the rest unsure, or not answering the question.
168. As discussed in paragraphs 130 and 131, this impact assessment finds that costs to the public sector will likely be a small component of the overall figure and it was deemed disproportionate to place a specific estimate on these costs.

### **Competition impacts**

169. HSE does not anticipate any competitive impacts arising from the implementation of the amendments to the PPER. HSE is of the opinion that any perceived advantage of not providing PPE to limb (b) workers could be considered an issue of non-compliance with the PPE regulation regardless of the amendment.

### **Environmental impacts.**

170. We do not anticipate significant environmental impacts from this regulation amendment. A minority of stakeholders have suggested that there could be an increase in the use of disposable PPE. It has not been considered proportionate at this time to explore these minority responses.

## **J. A summary of the potential trade implications of measure**

171. It is not anticipated that there will be any trade implications of the measure.

## **K. Monitoring and Evaluation**

172. A post implementation review (PIR) will be carried out on the amending PPER to monitor and evaluate the impact of the change. Whilst the regulations will be subject to a formal statutory review five years from when the regulations come into force, HSE will be continually monitoring and evaluating the effectiveness and impact of the changes to PPER.
173. HSE's current recording systems and recording database will be used to assess the impact of the amending regulations.
174. HSE will monitor the numbers of enforcement actions taken in relation to the amended PPER, and also analyse the number of concerns raised with HSE in relation to workers, who feel their employers are not complying with the amending regulations.
175. HSE also engages on a regular basis with a number of relevant stakeholders. HSE expects to get feedback on the changes via these channels. The ability and willingness of industries and organisations who will be required to put in additional measures as a result of new obligations placed on them, will be significant factors in relation to compliance with the amended PPER.