

# Fireworks and Pyrotechnic Articles (Scotland) Bill

## [As amended at stage 2]

---

## Revised Financial Memorandum

### Introduction

1. As required under Rule 9.7.8B of the Parliament's Standing Orders, this revised Financial Memorandum is published to accompany the Fireworks and Pyrotechnic Articles (Scotland) Bill, (which was introduced in the Scottish Parliament on 1 February 2022) as amended at Stage 2. Text has been added or amended as necessary to reflect the amendments made to the Bill at Stage 2 and these changes are indicated by sidelining in the margin.

2. This revised Financial Memorandum has been prepared by the Scottish Government to set out the costs associated with the measures introduced by the Bill, as amended. It does not form part of the Bill and has not been endorsed by the Parliament.

### Background

3. The Policy Memorandum, which is published separately, explains in detail the background to, and the policy intention behind, the Bill. This revised Financial Memorandum sets out the estimated costs associated with the measures introduced by the Bill and, as such, it should be read in conjunction with the Bill and the other accompanying documents.

### Bill purpose and parts

4. The principal policy objectives of this Bill are to protect public and community safety and wellbeing by ensuring fireworks and pyrotechnics do not cause harm, distress or serious injury. The provisions included within the Bill will support a cultural shift in how fireworks and pyrotechnics are used in Scotland. This will be achieved by altering how the general public can access and use fireworks and pyrotechnics, by making provisions for new restrictions to apply to their purchase, acquisition, possession and use, with new criminal offences to apply where these restrictions are not complied with. The Bill is in 7 parts:

This document relates to the Fireworks and Pyrotechnic Articles (Scotland) Bill (SP Bill 10A) as amended at Stage 2

- Part 1: Key concepts, including the meaning of fireworks and pyrotechnic articles and categories.
- Part 2: Fireworks licensing.
- Part 3: Restrictions on supply and use of fireworks and pyrotechnic articles.
- Part 4: Fireworks control zones.
- Part 5: Pyrotechnic articles at certain places or events.
- Part 6: Exemptions and enforcement.
- Part 7: General provisions, including reporting on the operation of the Act, interpretation, regulations, ancillary provision, Crown application and commencement.

## Costs, savings and changes in revenue due to the Bill

5. A summary of costs, savings and changes in revenue due to the Bill is at the end of this Financial Memorandum.

6. It is anticipated that some provisions of the Bill will lead to an increase in costs to the Scottish Administration and local government. This will be offset, in part or full, by income from charging a fee for licences as part of the fireworks licensing system. It is expected that costs will be highest in the first three years (2022/23 to 2024/25) as measures within the Bill are implemented and new systems and processes are developed alongside associated communications and awareness-raising. Once these are established, it is estimated that the costs will reduce and flatten, as will any income from licensing fees.

7. The estimated costs, savings and revenue are set out below under the relevant Part of the Bill and according to where they fall i.e.:

- The Scottish Administration, including the Scottish Government, the Crown Office and Procurator Fiscal Service (COPFS), the Scottish Courts and Tribunals Service (SCTS), the Scottish Fire and Rescue Service (SFRS) and NHS Scotland.
- Local authorities.
- Other bodies, individuals and businesses, including Police Scotland and the Fireworks Industry.

## Consultation and source of figures

8. This Financial Memorandum uses the information, evidence and data available from two public consultations carried out in 2019<sup>1</sup> and 2021,<sup>2</sup> the work of the

---

<sup>1</sup> <https://consult.gov.scot/safer-communities/fireworks/>

<sup>2</sup> <https://consult.gov.scot/justice/use-and-sale-of-fireworks-in-scotland/>

This document relates to the Fireworks and Pyrotechnic Articles (Scotland) Bill (SP Bill 10A) as amended at stage 2

independent Fireworks Review Group<sup>3</sup> and Scottish Government-facilitated stakeholder discussions on pyrotechnic misuse with Police Scotland, the Scottish Police Federation, British Transport Police and the COPFS. In addition, the Scottish Government has met and engaged with a range of stakeholders such as Police Scotland, local authorities, COPFS and firework retailers requesting and examining information, data and estimates of costs, savings and changes in revenue due to the Bill.

9. A Scottish Government and Local Government Short Life Working Group was formed to identify likely financial costs, savings and changes in revenue for local government from the Bill and advise on methods to produce best estimates of these and to identify and provide data and analysis to inform and make financial estimates. The membership included local government officers with knowledge of fireworks and finance, with representation from urban and rural local authorities in Scotland. It included representatives from the Society of Chief Officers of Trading Standards in Scotland (SCOTSS), the Society of Local Authority Lawyers and Administrators in Scotland, Directors of Finance and the Convention of Scottish Local Authorities (CoSLA).

10. Information and data were provided by Police Scotland, the COPFS and SCTS during individual meetings and through correspondence.

11. Data estimates on the number of firework purchases and firework retailers provided by the British Fireworks Association and reported by the Fireworks Review Group,<sup>4</sup> along with average costs of purchase, have been used for this Financial Memorandum. There were requests to the British Fireworks Association, the British Pyrotechnists Association and specialist firework retailers for further economic data or information to inform the Financial Memorandum, but none was received by the time of publication for introduction (1 February 2022). Additional information on the number of firework purchases provided by the British Fireworks Association to the Finance and Public Administration Committee during Stage 1 scrutiny of the Bill so has been used for this Financial Memorandum as revised after stage 2.

## Costs, savings and changes in revenue to the Scottish Administration

12. This section sets out the costs, savings and changes in revenue for the Scottish Administration and covers:

- Establishing and operating the licensing system (Part 2 of the Bill).
- Public information and awareness raising for measures across the Bill.
- Costs and changes in revenue associated with restrictions on supply and use of fireworks and pyrotechnics (Part 3 of the Bill).

---

<sup>3</sup> [Firework Review Group - gov.scot \(www.gov.scot\)](http://www.gov.scot)

<sup>4</sup> <https://www.gov.scot/publications/consultation-fireworks-scotland-experiences-ideas-views-analysis-responses-public-consultation-exercise/>

This document relates to the Fireworks and Pyrotechnic Articles (Scotland) Bill (SP Bill 10A) as amended at Stage 2

- COPFS and SCTS costs associated with new offences.
- Costs and savings to the SFRS and to the NHS.
- Costs associated with reviewing the operation of the Act.

## Part 2 – Fireworks licensing

13. There will be both costs and income associated with the introduction of the licensing system. There are two parts where there are costs for the Scottish Government: (i) developing and establishing the licensing system; and (ii) operating the licensing system. There will be costs for the Scottish Administration to provide public information and raise public awareness of all new Bill Parts, including licensing, and these are set out below (in paragraphs 39 to 42). There will be income from the fee charged for a licence and paid for by applicants.

14. For the purposes of this Financial Memorandum, the costings are based on the licensing system commencing from late 2023 at the very earliest (Year 2). This will require development of the licence system to begin in Year 1 with the earliest possible operational commencement of the system happening at the end of the Year 2 (2023). The costings are given for financial Year 1 (April 2022 – March 2023), Year 2 (April 2023 – March 2024) and Year 3 (April 2024 – March 2025). Figure 1 sets out these key dates and timescales.

Figure 1 timeline - Fireworks licensing system

Year 1 April 2022 – March 2023	Year 2 April 2023 – March 2024	Year 3 April 2024 – March 2025
(i) Develop licence system (late 2022/early 2023)	(ii) Operate licensing system from late 2023 (earliest)	

## Number of licence applications and potential revenue from fees

15. Prior to the new fireworks licensing system being introduced, to calculate potential costs and possible fee income revenue, it was necessary to estimate the number of people who may seek a fireworks licence in its initial period and in the first few years of operation. This was also necessary in order to provide some illustrative analysis of the potential impacts of the Bill (all elements of the Bill including, but not limited to, licensing) on firework sales in Scotland. The two are clearly related – the number of people wanting to buy fireworks will have an impact on the number of people who require a licence. The same analysis that underpins this section (regarding licence fees) is also used to estimate sales impacts – however the results presented here only look at demand for licences. The broader discussion of demand for fireworks can be found in paragraphs 110 to 111. Due to the lack of available evidence about both the current volume, value and distribution of fireworks sales, and about the possible impact of the Bill measures on future fireworks sales, this analysis remains very much illustrative. The analysis relies on a number of broad assumptions in order to create low impact, medium impact and high impact scenarios that help illustrate both the extent of uncertainty regarding, and the possible scale of, the effects of the Bill.

This document relates to the Fireworks and Pyrotechnic Articles (Scotland) Bill (SP Bill 10A) as amended at stage 2

16. The range of results is very large – reflecting the lack of data available to inform an analysis. Care should be taken in interpreting the results of this analysis, which are intended to help aid transparency and inform discussion over possible impacts rather than to provide a precise estimate of the scale of impacts. The paragraphs below discuss the methodology employed.

17. The Fireworks Review Group report<sup>5</sup> states there are around 250,000 total retail sales of fireworks annually, with an estimated average cost of £50 per sale.<sup>6</sup> It is known that the majority of public fireworks purchases are made around 5th November. Therefore, it is assumed for the purposes of this Memorandum that the majority of people make one annual firework purchase, although it is recognised some people will make more or none in some years. After clarification from the industry, it is assumed that F2 and F3 sales account for 100% of these sales<sup>7</sup>. This acts as a starting point for the illustrative analysis.

18. It is then assumed that the combination of firework related measures included within the Bill, including the requirement for a licence, may reduce the number of people purchasing fireworks and therefore applying for a licence. Two avenues are envisaged by which demand for fireworks is reduced. The first, and most important factor, is an assumption about the measures contained within the Bill reducing people's demand or appetite for fireworks. The second and less important factor is an assumption that subsequent to this reduced demand, some sales are diverted away from Scottish retailers and toward other avenues. These are discussed, in turn, within the next two paragraphs.

19. In order to inform the low, medium and high impact scenarios, three different demand reduction responses (low, medium and high) by the public are modelled. It is assumed that these responses will result from the combination of firework related measures included within the Bill. There was no specific data available to suggest what the demand reduction might be under the various demand reduction scenarios and, given this, these assumptions are broad and illustrative in nature, rather being informed by data. In the absence of data to inform the analysis, it is assumed that a 75% reduction in the number of people wishing to purchase fireworks and therefore applying for a licence will result from a high demand reduction scenario; 50% under a medium demand reduction scenario; and 25% under a low demand reduction scenario. It is hoped that these very broad assumptions help to reflect the level of uncertainty, and lack of evidence, over possible outcomes.

20. The analysis also contains an attempt to capture the potential for some of the demand for fireworks to be diverted from registered retailers in Scotland to sources that are illegal, e.g. black market sales, for the firework provisions across the Bill. In order to do this a displacement assumption is employed, which attempts to capture the proportion of sales that could be redirected in this manner. While there is no evidence

---

<sup>5</sup> <https://www.gov.scot/publications/firework-review-group-report-scottish-government/documents/>

<sup>6</sup> Estimate provided by the British Fireworks Association during deliberation of the Fireworks Review Group.

[BFA Finance Committee 040322FS1302 \(parliament.scot\)](https://www.parliament.scot/committees/finance/BFA_Finance_Committee_040322FS1302)

available from which to estimate potential levels of displacement, it is not anticipated that this will be on a large scale based on advice from Police Scotland. Police Scotland has advised that it has no evidence to suggest there will be any significant increase in illegal sales following the introduction of these proposed measures. The international case study review<sup>8</sup> undertaken by the Scottish Government did not identify the emergence of illegal markets when similar restrictions were introduced. Recovery of illegal fireworks is currently fairly low, with Trading Standards advising that the majority of recoveries tend to be a combination of over-stocking or sales to under age people; although there are difficulties in establishing an accurate picture of the nature and scale of online sales. Hence, for illustrative purposes the analysis assumes low levels of displacement at the following rates: 1% under a low displacement scenario, 2% under a medium impact scenario and 5% under a high impact scenario. These are applied to the demand reduction scenarios to estimate potential impacts on the level of fireworks purchases and industry revenues. While displacement analysis is more complex than the simple low/medium/high impact scenarios for demand reduction, the impact of this displacement is far smaller than the over-arching assumptions regarding a reduction in demand.

21. In order to keep the results of this analysis clear, both of the factors discussed above – demand reduction and displacement – are combined into three scenarios. The low displacement rate assumption is applied to the low demand reduction assumption to produce a “low impact” scenario. In this scenario the demand reduction is applied first, reducing demand from 250,000 to 187,500. Subsequently, the 1% displacement assumption is applied to reduce the demand seen in Scottish retailers from 187,500 by 1% (1,875) to 185,625. Similarly, the medium displacement assumption is combined with the medium demand reduction to produce a “medium impact” scenario, and the high displacement assumption is combined with the high demand reduction assumption to create a “high impact” scenario. This can be seen in Table 1. It is worth highlighting that the estimates of demand relate to demand for F2 and F3 fireworks alone and doesn’t include any information relating to F1 and F4.

22. For the purposes of estimating demand for licences specifically, two more assumptions are applied. In the first instance it is assumed that sales are unique – that each sale represents an individual consumer who wishes to purchase a licence as a result of their purchase. This is assumed largely for the sake of simplicity, although clearly if single consumers account for multiple sales this would reduce the demand for licences, as only one licence will be needed for multiple sales (assuming the licence is still valid). It is further assumed that the majority of people (75%) that wish to hold a licence will apply in the first year they can (towards the end of Year 2). If this is the case, it is estimated that there could be 44,531 applications in a high impact scenario and 139,219 in a low impact scenario (Table 1).

---

<sup>8</sup> <https://www.gov.scot/publications/fireworks-legislation-impacts-international-evidence-review/>

Table 1 Illustrative estimates of firework licence demand under demand reduction and displacement scenarios

	Scenario		
	Low impact	Medium impact	High impact
<b>Estimated annual sales before the introduction of the Bill</b>			
Estimated volume of F2/F3 fireworks sales before the Bill	250,000	250,000	250,000
<b>Illustrative estimates of impact of reduction in demand and subsequent displacement of sales</b>			
Amount demand is reduced by as a result of Bill	25%	50%	75%
Reduction in demand (volume of sales)	62,500	125,000	187,500
Increase in displacement (% of remaining sales)	1%	2%	5%
Increase in displacement (volume of sales)	1,875	2,500	3,125
<b>Estimated annual sales after the impacts of the Bill</b>			
Remaining sales (volume)	185,625	122,500	59,375
<b>Assumptions regarding licence demand</b>			
Assumption - volume of licences demanded in year 1	75%	75%	75%
Assumption - volume of licences required per purchase	1.0	1.0	1.0
<b>Estimated number of licence applications (long term)</b>			
Illustrative estimate	185,625	122,500	50,375
<b>Estimated number of licence applications (Year 1)</b>			
Illustrative estimate	139,219	91,875	44,531

## Licence fees

23. Licence fees will be set at a level which is not intended to present an excessive cost barrier to users of fireworks. Fireworks licensing will come at a cost in terms of processing the applications, issuing licences, monitoring existing licence holders and the development and operation of the online fireworks safety course. As such, it is right that the process for obtaining a licence should incur a fee. While cost recovery will be a key determinant of the fee level, a fee should generally be chargeable in order to ensure that applications are made with due consideration of the responsibilities involved in obtaining a fireworks licence. The Scottish Government believes that it is appropriate to charge applicants regardless of the outcome of their application as costs are incurred during the processing of both successful and unsuccessful applications. This is in line with comparable processes, such as air weapons licences, where the fee is paid on application and there are no refunds if the application is refused.

24. The actual fee to be payable by applicants will be set out in secondary legislation. For the purposes of this Financial Memorandum, the options of a fee of £20, £30 or £50 have been used to model possible income levels. In developing these options other licensing schemes were considered. This included the approach in Northern Ireland to fireworks licensing, where the fee is dependent on the size of the display and ranging

from £30 to £160 per display,<sup>9</sup> as well as the air weapons licence fee in Scotland, which is currently set at £72 for 5 years. Taking these into consideration, it assessed that the three fee options illustrated strike an appropriate balance between setting a fee to cover operating costs of the system, whilst not being disproportionate to members of the public wishing to apply for a licence.

25. Table 2 provides estimates of potential revenue that could be raised from the licence fee under the low, medium and high impact scenarios for the Bill where 75% apply in the first year of the licensing system being operational. In a low impact scenario, where 75% of applicants apply in the first year, the total income at the highest charge, £50, is estimated to be £6,961,000 and at the lowest charge, £20, it is estimated to be £2,784,000. Alternatively, in a high impact scenario, where 75% of applicants apply in the first year, a £50 fee is predicted to raise £2,227,000 and a £20 fee £891,000.

Table 2 Year 1 income from fees for licence (fee revenue rounded to nearest £000)

	Scenario		
	Low impact	Medium impact	High impact
Estimated number of applicants (assuming 75% of potential applicants apply)	139,219	91,875	44,531
Revenue from £20 fee	£2,784,000	£1,838,000	£891,000
Revenue from £30 fee	£4,177,000	£2,756,000	£1,336,000
Revenue from £50 fee	£6,961,000	£4,94,000	£2,227,000

## Fireworks licensing system

26. This section covers (i) developing and establishing the licensing system; and (ii) operating the licensing system. The costs for (i) will include developing the licence application process, associated IT systems and its administration and management as well as development and delivery of the mandatory online fireworks safety training course. Costs for (ii) will include operating the licence application system including application processing, checking, updating and refreshing the safety training when required and for general management and administration.

27. The practical, operational aspects of the licensing system will be fully determined in the development of the Bill implementation, however the following is the model currently anticipated and is the basis for the costings outlined. The licence system will comprise the submission of an online application form which will be checked to establish whether the mandatory requirements are met. Where these are successfully

<sup>9</sup> Northern Ireland has an established firework licensing system that is also administered centrally which permits the purchase, possession and use of fireworks for a particular date and location, so provides some comparator information. The fee is set according to the number of people attending the event. Under the Explosives (Fireworks) Regulations (Northern Ireland) 2002 the firework licence fees are set as: £30 not exceeding 100 attendees; £80 not exceeding 1,000; and £160 exceeding 1,000.



This document relates to the Fireworks and Pyrotechnic Articles (Scotland) Bill (SP Bill 10A) as amended at stage 2

established, a proof of licence will be sent to the licence holder. This is likely to be done through an email or QR code, with the option to download a printable version. The proof of licence will be required to be presented to a retailer in order to purchase F2 and F3 fireworks. Arrangements will be put in place, utilising the licence system and register of licence holders, to enable data to be shared with Police Scotland in real time in order for police to check if a relevant person has a licence. Processing licence applications will require Scottish Government staffing resources. In addition to routine processing and checking of applications, a sample will undergo enhanced checks to verify that the information provided by an individual during the licence application process is accurate. There is an offence included in the Bill covering the provision of false statements, which means that if an individual is found to have provided false information during the application process they will be committing an offence.

28. The intention is to build a digital firework licence system, with a combination of automatic and manual input in the routine checking and processing of applications. It is anticipated that a sample of applications will undergo an enhanced verification check on specific elements of the information provided by an individual, for example, information relating to relevant unspent criminal convictions.

29. The licensing system will have a number of associated costs, although it is anticipated these will reduce after the initial costs to develop and establish the system in Year 1 (2022/2023), anticipating the majority of licence applications will be in Year 2 (2023/2024). It is then expected there will be minimal processing and maintenance costs until the licence renewal applications process commences.

## Establishing the Licensing System

30. The initial task of establishing the licensing system will comprise: commissioning the licence IT system and managing this process; developing application materials (application forms, licence design and applicant guidance); and preparing content and publishing the online firework safety training course.

31. The estimate, advised on by Scottish Government officials, for delivery of the IT solution is £1.5m although a variation of +/- 50% is required i.e. £750,000 - £2,250,000, based on recent commissioning experience. The costs are dependent on precise requirements and are driven by the level of infrastructure investment needed (hosting, licensing, public facing forms development/ re-use and customer and licence records storage), the amount of user research, usability testing and accessibility testing required, and the complexity of the service. For this Financial Memorandum it is assumed that two thirds of costs associated with establishing the licensing system will be in Year 1 with the remaining one third in Year 2 (Table 3). Any ongoing IT costs will be clarified in planning for implementation.

**Table 3 Licence system IT cost estimates Year 1 and Year 2**

	Year 1 midpoint	Year 1 - 50%	Year 1 + 50%	Year 2 midpoint	Year 2 - 50%	Year 2 + 50%
IT system cost	£ 1,000,000	£500,000	£1,500,000	£500,000	£250,000	£750,000

32. It is estimated that the staff costs will amount to £100,489, as set out in Table 4. This is based on current average salary and employment costs (employer National Insurance, pension etc.). It is envisaged that the main tasks to establish the licence system will be to specify, commission and manage delivery of the IT system for fireworks licences, develop application materials and guidance, prepare content and commission the online fireworks training course. Assessment of the required staff resource, for one year, is 0.85 Full Time Equivalent (FTE) of a Policy Officer; 0.5 FTE of a Senior Policy officer and of a Policy Officer and 0.2 FTE of a Team Leader. The estimate for the online fireworks safety training design and IT package and content is £75,000. The total cost of establishing the licensing system in Year 1 is therefore estimated to be between £675,489 - £1,675,489 (Table 4).

**Table 4 Part 2 Establish the licensing system Year 1**

	Part 2	Year 1	IT system cost range	
	Establish the licensing system		-50%	+50%
Tasks	Role			
Specify, commission and manage delivery of IT system to process firework licences Develop application materials and guidance Prepare content online firework safety training Specify and commission Fireworks Safety course	Policy Officer 0.85 FTE	£32,263		
	Senior Policy Officer 0.5 FTE	£22,778		
	Policy Manager 0.5 FTE	£29,767		
	Team Leader 0.2 FTE	£15,681		
	<b>Total staff costs</b>	<b>£100,489</b>	<b>£100,489</b>	<b>£100,489</b>
	IT system cost	£1,000,000	£500,000	£1,500,000
	Firework safety course online	£75,000	£75,000	£75,000
	<b>Total cost for establishing licensing system</b>	<b>£1,175,489</b>	<b>£675,489</b>	<b>£1,675,489</b>

## Operate the licensing system

33. The licensing system will use digital technology for the application and licence issuing process to enhance efficiency, accuracy and security. The majority of applications will be granted digitally with options for paper applications and licences for people not able to access or use IT. It is clearly essential that applications are processed timely. Minimum licence processing times will be communicated widely and

on the licensing system to ensure that applicants are aware of the number of weeks it will take for their application to be processed and their licence to be granted. This will set realistic expectations of when to apply in order to receive a licence in advance of when an applicant wishes to purchase fireworks. Whilst the standard licence term will be determined through secondary legislation it is anticipated this will be a 5 year period. It is anticipated that transitional arrangements will be in place, with staggered licence terms and pro rata fees, to spread the renewal process over years 3-5 and ease resource pressures during renewal periods.

34. After developing and establishing the licensing system in Year 1, the main staff roles thereafter will be to manage the system, deal with queries and the routine processing and checking of applications (the enhanced verification on a proportion of applications is costed in Table 7 below). Assessment of staff resource to deal with these tasks for Year 2 is estimated to be a total cost of £94,444 for the core staff resource comprising: 1.5 FTE of a Policy Officer; 0.2 FTE of a Policy Manager, managed by 0.25 FTE of a Team Leader (Table 5). The IT costs are estimated as £500,000, ranging from £250,000 - £750,000 as shown above in Table 3. In Year 3, it is envisaged that the system will be established and the number of licence applications will reduce, therefore staffing requirement will be to manage and ensure maintenance of the system, deal with queries and any applications and it is estimated this will involve: 1 FTE Policy officer; 0.3 FTE Policy Manager and 0.1 FTE Team Leader. The staff costs and IT support costs are anticipated to reduce to £63,704 (Table 6).

Table 5 Year 2 Operation of the licence system

Core staff tasks	Role	Cost	IT system range	
			-50%	+50%
Management, administration continuous improvement application processing and licence system. Dealing with enquiries	Policy officer (1.5 FTE)	£56,936		
	Policy Manager (0.2 FTE)	£11,907		
	Team Leader (0.25 FTE)	£19,601		
	IT support	£6,000		
	<b>Total staff costs</b>	<b>£94,444</b>	<b>£94,444</b>	<b>£94,444</b>
	IT System	£500,000	£250,000	£750,000
	<b>Total</b>	<b>£594,444</b>	<b>£344,444</b>	<b>£844,444</b>

Table 6 Year 3 Operation of the Licence System

Year 3		
Core staff costs	Role	Cost
	Policy Officer (1 FTE)	£37,957
	Policy Manager (0.2 FTE)	£11,907
	Team Leader (0.1 FTE)	£7,840
	IT support	£6,000
	<b>Total</b>	<b>£63,704</b>

35. As outlined above, the intention is to build a digital system for routine processing of applications. In addition to this, there will be costs associated with staff intervention to deal with queries and undertake enhanced verification on a proportion of the applications. The proportion of applications that will undergo enhanced verification checks is still to be established. This will be informed by a risk-based approach that considers the likelihood of inaccurate information on the application and its impact. The staff time and costs are also impacted by the number of applications for licences. For the purposes of this Financial Memorandum, two scenarios are used: one assumes a very low likelihood of inaccurate information being provided on applications, so enhanced level of checks at 5%; while the other assumed a higher level of inaccurate information being provided on applications and therefore the requirement for a higher proportion of enhanced checks at 25% (Table 7).

36. The cost estimates are based on a Policy Officer checking and verifying, on average, 30 applications per day. Senior input, supervision and quality control will be by a Policy Manager (this has been assessed as requiring 10% of Policy Officer time). The potential maximum and minimum total costs for Years 2 and 3 range from £19,486 (under a high impact scenario, as described in paragraphs 20 to 23) to £304,591 (under a low impact scenario, as described in paragraphs 20 to 23). The lower estimated cost is for enhanced checking of 5% of applications under a high impact scenario; while the higher cost is for enhanced checking of a 25% of applications under a low impact scenario (Table 7).<sup>10</sup>

**Table 7 Costs Year 2 & 3 Enhanced applications checks**

	Low impact – high number applications		High impact - low number applications	
	5% check	25% check	5% check	25% check
Year 2	£45,689	£228,444	£14,614	£73,071
Year 3	£15,230	£76,148	£4,871	£24,357
<b>Total</b>	<b>£ 60,918</b>	<b>£304,591</b>	<b>£19,486</b>	<b>£97,428</b>

## Summary

37. Table 8 and Table 9 below summarise the potential costs – both at low estimates (Table 8) and high estimates (Table 9) for establishing and operating the licensing system. Potential income over those 3 years could be informed by the information in Table 2 which looked at possible Year 1 income. Table 2 predicted ranges of £0.9m to £2.8m with a £20 fee, £1.3m to £4.2m with a £30 fee and £2.2m to £7.0m with a £50 fee. It is worth noting that Table 2 assumed that 75% of potential applicants would apply for a licence in Year 1. With a licence potentially lasting five years before needing to be renewed, it is reasonable to assume that the remaining 25% would occur over years 2-5 of the licensing system being in place. Further income, albeit at a significantly lower

<sup>10</sup> The figures are calculated by assuming a B1 member of staff can undertake enhanced checking of 30 applications per day, and by estimating the number of days that will be required to process the number of applications to be checked under each of the scenarios (low/high impact scenario and lower/higher enhanced checking); and then by calculating the proportion of the working year this will take and applying this proportion to a B1 annual salary, adding on the required checking of a policy manager.

This document relates to the Fireworks and Pyrotechnic Articles (Scotland) Bill (SP Bill 10A) as amended at stage 2

level, could therefore be expected in years 2 to 5 prior to the initial cohort of licences needing to be renewed, and this is summarised in Table 10 below.

**Table 8 Low estimated costs Part 2 for Years 1-3**

<b>Cost - low estimated</b>	<b>Ref</b>	<b>Yr 1</b>	<b>Yr 2</b>	<b>Yr 3</b>	<b>Total</b>
Establish licensing system - staff	Table 4	£100,489	£0	£0	£100,489
Establish licensing system - IT	Table 4	£500,000	£250,000	£0	£750,000
Develop online fireworks training	Table 4	£75,000	£ 0	£0	£75,000
Manage & operate licensing system	Table 5	£0	£94,443	£63,704	£158,147
Enhanced application checks	Table 7	£0	£14,614	£4,870	£19,484
<b>Total</b>		<b>£675,489</b>	<b>£359,057</b>	<b>£68,574</b>	<b>£1,103,120</b>

**Table 9 High estimated costs Part 2 for Years 1-3**

<b>Cost - high estimated</b>	<b>Ref</b>	<b>Yr 1</b>	<b>Yr 2</b>	<b>Yr 3</b>	<b>Total</b>
Establish licensing system - staff	Table 4	£100,489	£94,443	£-	£194,932
Establish licensing system - IT	Table 4	£1,500,000	£750,000	£-	£2,250,000
Develop online fireworks training	Table 4	£75,000	£-	£-	£75,000
Manage & operate licensing System	Table 5	£-	£94,443	£63,704	£158,148
Enhanced Licence application checks	Table 7	£-	£228,444	£76,140	£304,584
<b>Total</b>		<b>£1,675,488</b>	<b>£1,167,330</b>	<b>£139,844</b>	<b>£2,982,662</b>

**Table 10 Potential income from fees for licence - (fee revenue rounded to nearest £000 over 5 year period)**

	<b>Scenario</b>		
	<b>Low impact</b>	<b>Medium impact</b>	<b>High impact</b>
Estimated number of applicants	185,625	122,500	59,375
Revenue from £20 fee	£3,713,000	£2,450,000	£1,188,000
Revenue from £30 fee	£5,569,000	£3,675,000	£1,781,000
Revenue from £50 fee	£9,281,000	£6,125,000	£2,969,000

## Costs for public information and awareness

38. There will be costs for the Scottish Administration to provide public information and raise public awareness of all new firework and pyrotechnic article provisions under the Bill prior to, and once they are in, operation. This is essential to ensure maximum public knowledge for compliance. It is intended this will build on existing established public awareness and communication campaigns run by the Scottish Government and other stakeholders, including Police Scotland and the SFRS. In addition there will be

This document relates to the Fireworks and Pyrotechnic Articles (Scotland) Bill (SP Bill 10A) as amended at Stage 2

continued work via the established partnerships with public and voluntary sector organisations and communities for effective awareness-raising and understanding on the appropriate and legal use of fireworks and pyrotechnics.

39. Recent Scottish Government fireworks communications expenditure has been used as a reference for costs. The awareness and information campaign strategies will be fully developed in planning implementation of the measures in the Bill although, as noted above, it is anticipated these will build on existing campaigns and routes of communication. The costs are higher in Year 2 and Year 3 to coincide with the fireworks licensing system and firework control zones coming into force. The public information and awareness campaigns in Year 2 will include initial information on these Parts as well as the restrictions on supply and use of fireworks and pyrotechnic articles. The aim from Year 4 is there will be sufficient awareness of the Bill measures that reminders of the purchase, acquisition possession and use of fireworks and pyrotechnic articles can be part of Scottish Government and partners' business as usual public information activities and costs absorbed in these.

40. It is anticipated that information and public awareness activities will run over all three years from implementation at a total estimated cost of £172,000 as follows (Table 11):

- Year 1 (2022-23) costs are estimated to be £45,000. This will prioritise communicating: the restricted days of sale of fireworks, and the proxy purchase of fireworks and pyrotechnic articles. This is likely to be most intense in the lead up to traditional firework periods. The costs are for research, evaluation and design of materials, including working with Trading Standards and engagement with organisations to develop and test materials for the general public and specific groups, and production of all materials required for campaign delivery and media and communication, material and briefing for partners.
- Year 2 (2023-24) costs are estimated to be £55,000. The greatest cost for Year 2 will be initial awareness-raising and information about the legal requirement for a licence to purchase fireworks and the potential for firework control zones, with continuing information on the existing provisions in place. The costs will be for media and communications, production of material, briefing for partners and monitoring of impact.
- Year 3 (2024-25) costs are estimated to be £72,000 for public awareness and understanding of the licensing system and fireworks control zones. The costs are for media and communication, material and briefing for partners.

**Table 11 Costs for Bill information and raising public awareness activities**

<b>Key tasks</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Total</b>
Research, evaluation, design, production of materials	£10,000	£20,000	£25,000	<b>£55,000</b>
Media and communications	£35,000	£35,000	£47,000	<b>£117,000</b>
<b>Total</b>	<b>£45,000</b>	<b>£55,000</b>	<b>£72,000</b>	<b>£172,000</b>

This document relates to the Fireworks and Pyrotechnic Articles (Scotland) Bill (SP Bill 10A) as amended at stage 2

41. The work of local authorities, generally Trading Standards Officers, in educating and informing firework retailers on the changes will be an integral part of their broad enforcement role. This will be a significant contribution to awareness and understanding amongst retailers. Included in the costs for Trading Standards (see from paragraph 69) is a relatively modest cost for local awareness-raising with retailers.

### Part 3: Restrictions on supply and use of fireworks and pyrotechnic articles

42. The Bill sets out the permitted days when F2 and F3 fireworks can be supplied and used; and provides a power for the Scottish Ministers, by regulation, to make provision about the payment of compensation to address the economic impact of restricted days of supply, if evidence of this is demonstrated, for those whose trade or business is wholly or mainly concerned with the supply, distribution or importation of fireworks. The Scottish Government is aware of nine retailers who are currently licensed to sell fireworks all year round in Scotland and one importer of fireworks which primarily imports into Scotland; and to whom this compensation scheme may apply.

43. This power enables the Scottish Ministers to make provision as to the circumstances in which compensation may be paid, and to whom, calculation of compensation, the process for claiming compensation and for resolving disputes if such a compensation scheme is required. Due to the lack of data and information available it is not possible, at this stage, to estimate the likely cost of a potential compensation scheme to the Scottish Administration. While paragraphs 110 and 111 below set out a broad range for the potential reduction in demand for fireworks, including potential displacement, as a result of the introduction of a combination of the firework related measures within the Bill, it is not possible to accurately estimate the potential reduction in sales that may arise specifically from the restricted days of supply provision. Illustrative analysis of the potential impact on sales of the measures across the Bill was carried out to aid transparency; and the costs of a compensation scheme in relation to the restricted days of supply will be required to be informed by the design of the scheme itself alongside an evidence-informed assessment of the impact on such businesses.

### Crown Office and Procurator Fiscal Service and Scottish Courts and Tribunals Service

44. This section sets out the estimated costs to the COPFS and the SCTS for prosecution of offences under the Bill. This may cause changes to fines income, but these revert to UK Government and have a neutral impact on Scottish budget.

45. In 2019-20 there were 23 firework related charges reported to the COPFS, with 30 reported in 2020-21. For 2020-21, charges included: throwing, casting or firing a firework in a road or public place; using fireworks during night hours; and possessing fireworks under the age of 18 years. Three cases reported in 2020-21 have resulted in a

This document relates to the Fireworks and Pyrotechnic Articles (Scotland) Bill (SP Bill 10A) as amended at Stage 2

criminal prosecution. Between 2010-11 and 2019-20 there were 249 people that received a non-court disposal for a fireworks related charge.<sup>11</sup>

46. In relation to pyrotechnic articles misuse specifically, the number of charges for offences under sections 20(3) and 20(4) of the Criminal Law (Consolidation) (Scotland) Act 1995 - possession of a controlled article or substance within a sports ground and attempting to enter a designated sports ground with a controlled article or substance - is small.<sup>12</sup> In the 10-year period between 2011-2021, the total number of prosecutions commenced under sections 20(3) and 20(4) of the Criminal Law (Consolidation) (Scotland) Act 1995 was 70, with a further 24 charges receiving direct measures, and another 20 charges resulting in no action.

47. In that period, the highest yearly charge total was 2013-14 with 22 charges (nine of which were prosecuted) and the lowest was 2016-17 with six charges (of which four were prosecuted), with the average figure across this period being 11.4 per year. It is also likely that during this period a small number of charges for Culpable and Reckless Conduct involved pyrotechnic article misuse.

48. Police Scotland's Health and Safety reports show that, since 2017, an average of 78 accidents/near miss incidents per year were recorded at events where police officers could potentially have intervened to prevent an accident/near miss had powers been available to them. Some of these incidents may have been prosecuted under existing legislation, but others will not have been captured.

49. The number of cases identified and reported to the COPFS will also be affected by enforcement actions, for retailers, by Trading Standards. They typically use collaborative approaches, such as giving businesses advice and assistance to comply, with formal enforcement action where required.

50. It is considered that there will be some rise in reported offences and summary prosecutions but, due to the efforts that will be taken to raise awareness of the new provisions and encourage compliance, this is not expected to be significant. For the purposes of this Financial Memorandum it is estimated that there will be a rise in prosecutions in the first three years, and after that they may increase, plateau or reduce as the legislation becomes established. The following uses existing data on charges to estimate the potential minimum and maximum number of prosecutions and is summarised in Table 12:

- Part 2: Fireworks licensing - an estimated maximum of five prosecutions in Year 3.
- Part 3: Restrictions on supply and use of fireworks and pyrotechnic articles - an estimated maximum 10 prosecutions, seven new prosecutions in addition

---

<sup>11</sup> Data supplied by COPFS

<sup>12</sup> Data supplied by COPFS from an analysis of their case management database: charges reported to COPFS 2011 – 2021 - Criminal Law (Consolidation) (Scotland) Act 1995, section 20(3) and (4). As COPFS have no specific modifier for 'pyrotechnics', it is likely that charges/prosecutions for pyrotechnic misuse more broadly have been recorded in either the fireworks or explosive categories.



to the existing three (as discussed in paragraph 46). Recognising there were 30 reported firework related charges (see paragraph 46), the maximum number of prosecutions for this Part of the Bill is estimated as 20 in Year 1, with an additional rise of five cases into Year 2.

- Part 4: Firework control zones - an estimated eight additional prosecutions in Year 3. This is a stable number as it is envisaged offences and prosecution will be mainly for any newly designated zones.
- Part 5: Pyrotechnic articles in public places and at certain places or events – total prosecutions under these offences have been estimated at a maximum of 16 and a minimum of 8 in Year 1, then estimating a 50% rise in Year 2, before stabilising in subsequent years. These estimated figures are at the lower end of modelling due to the preventative effect the legislation aims to have on those who currently carry pyrotechnics to misuse them. While it could be argued that the addition of a public place possession offence alongside a designated places and events offence, increases the likelihood of further prosecutions, the rationale of this offence is to improve operational enforcement and a preventative approach where misuse occurs. The figures consider those charges currently prosecuted under existing legislation (Sections 20(3) and 20(4) of the Criminal Law (Consolidation) (Scotland) Act 1995, as well as a small number of incidents currently charged as Culpable and Reckless Conduct) as well as the possibility of additional charges, particularly from Year 2, based on a maximum of 20% (16) and minimum of 10% (8) of current near misses (78) as evidenced in Police Scotland data.

Table 12 Estimated number court prosecutions Fireworks and Pyrotechnics Bill Year 1 - 3

	Year 1		Year 2		Year 3	
	Min	Max	Min	Max	Min	Max
<b>Part 2</b>	0	0	0	0	3	5
<b>Part 3</b>	10	20	15	25	15	25
<b>Part 4</b>	0	0	0	0	8	8
<b>Part 5</b>	8	16	16	24	16	24
<b>Total</b>	<b>18</b>	<b>36</b>	<b>31</b>	<b>29</b>	<b>42</b>	<b>62</b>

51. The Scottish Government published data on the “Costs of the criminal justice system in Scotland”<sup>13</sup> and this was used to estimate court case costs, updating the most recent data for 2016-17. These are the average “unit costs” associated with pursuing prosecutions through the summary court procedures to estimate the range of total costs. It is anticipated, consistent with the general pattern of court disposals, that the most common outcome will be the imposition of a financial penalty.<sup>14</sup>

52. In 2016-17, in cases where COPFS commenced a prosecution, the average costs for a summary case comprise the average prosecution costs of £444; average

<sup>13</sup> [Scottish Government \(2019\) Costs of the criminal justice system in Scotland dataset: 2016-17](#)

<sup>14</sup> [Scottish Government \(2021\) Criminal Proceedings in Scotland](#)

court costs of £430 and Legal assistance of £604. Should a summary prosecution be made under the Bill, the average cost as outlined above would apply. Taking these numbers for 2016-17, and adjusting for inflation (converting to 2020-21 prices), the estimated total for Year 1 cases is approximately £30,000 to £60,000, Year 2 approximately £50,000 to £80,000 and Year 3 approximately £70,000 to £100,000 (Table 13). There are costs for the COPFS and the SCTS when prosecution is not commenced, but these are relatively small compared to prosecution.

Table 13 Estimated costs for court prosecutions Fireworks and Pyrotechnics Bill Year 1 - 3

Bill	Year 1		Year 2		Year 3	
	Min	Max	Min	Max	Min	Max
<b>Part 2</b>	£0	£0	£0	£0	£5,000	£8,000
<b>Part 3</b>	£17,000	£33,000	£24,000	£41,000	£25,000	£40,000
<b>Part 4</b>	£0	£0	£0	£0	£13,000	£13,000
<b>Part 5</b>	£13,000	£27,000	£27,000	£39,000	£27,000	£39,000
<b>Total</b>	<b>£30,000</b>	<b>£60,000</b>	<b>£51,000</b>	<b>£80,000</b>	<b>£70,000</b>	<b>£100,000</b>

## Costs and savings to SFRS and NHS

53. Emergency and health services' resources are required to deal with misuse and accidents related to fireworks and pyrotechnic articles. The Bill is intended to contribute to reducing the response required from emergency and NHS services to firework and pyrotechnic article incidents, bringing the associated cost savings, whilst achieving public and community safety. It is not possible to provide actual costings, as the Fireworks Review Group noted in their 2020 report, "it has not been possible to develop a full, comprehensive list of cost and resource implications, it is clear there is a considerable financial cost and resource requirement for Police Scotland, Scottish Fire and Rescue Service (SFRS) and local authorities in order to plan and prepare for 5th November and the period running up to it each year."<sup>15</sup>

54. For SFRS, 342 incidents with 'fireworks' as a contributing factor were identified between 2009-10 and 2019-20 and 70% of yearly firework related incidents occurred in October and November.<sup>16</sup>

55. There is preventive work undertaken by SFRS, local authorities and Police Scotland to plan and prepare for 5th November each year. SFRS provided a cost estimate of approximately £66,000 spent on preventative activity in 2019, although this does not cover all their activities. Given this, and that there is no costs data from the other organisations, this is an underestimate of costs for SFRS and the other public bodies. It is anticipated that this preventive work will continue to provide support, changing the relationship with fireworks in Scotland, and consequently it is not anticipated these costs will change in the first three years of the Bill.

<sup>15</sup> [Firework Review Group: report to the Scottish Government - gov.scot \(www.gov.scot\)](https://www.gov.scot/resources/documents/2020/12/20201215_firework_review_group_report_to_the_scottish_government.pdf)

<sup>16</sup> [Firework Review Group: report to the Scottish Government - gov.scot \(www.gov.scot\)](https://www.gov.scot/resources/documents/2020/12/20201215_firework_review_group_report_to_the_scottish_government.pdf)

56. Two-fifths (40%) of the acts of violence directed against firefighters (physical abuse, verbal abuse, objects thrown at firefighters/appliances and other acts of aggression) which take place over the course of a year are recorded during the months of October and November, which only represents around 17% of the year, although it is not possible to distinguish if assaults during the firework period are firework related<sup>17</sup>. The number of incidents recorded has varied across the years from a high of 10 in 2013 and 2018, to a low of one in 2015.

## Injuries related to fireworks and cost to NHS

57. The evidence suggests that in the UK, the number of fireworks-related injuries is not decreasing over time, with a spike in fireworks related injuries around festivals, with a majority occurring at private displays.<sup>18</sup> Common fireworks related injuries affect the hands and head. Data collected and reported to the Fireworks Review Group, on firework injuries in Scotland in 2019,<sup>19</sup> demonstrated a clear link between deprivation and firework injury, with eight times as many patients presenting from the most deprived 10%, compared to the least deprived 10%, as according to the Scottish Index of Multiple Deprivation. The majority of injured persons were young people: 23 (56%) were under 16 years of age and 26 (63%) were male. Most patients presented to minor injury units (MIU) and emergency departments (ED) in November, with a spike of 18 patients (44%) attending on the 5th November 2019.

58. Data relating to firework injuries in the Greater Glasgow and Clyde (GGC) NHS Health Board area were also collated, covering 2008 to 2019.<sup>20</sup> As with the national data, there is a clear correlation between increased deprivation and firework injury, males were the majority and just over half of injuries were amongst children under 18. From this work it was estimated total health expenditure on treating firework injuries over the period 2008 to 2019 in Greater Glasgow and Clyde was £463,583, a mean cost of £38,632 per annum. The majority of this cost (£438,775) is incurred in treating patients admitted to hospital and there may also be primary care costs. There is no evidence of either an upward or downward trend in the costs data. This is likely to be an underestimate as the cause of injury is not always captured in the routine administrative records and certain resource use, including primary care.<sup>21</sup>

59. As Glasgow health board has 42% of the population of Scotland, the costs could be estimated to be up to double this amount for Scotland at £77,264 per annum.

60. The recording of incidents and injuries by NHS and Police Scotland systems do not allow for disaggregation of those involving 'pyrotechnic articles' as opposed to fireworks. Therefore, it cannot be stated with certainty the number of injuries caused by devices classified as pyrotechnic articles.

---

<sup>17</sup> [Firework Review Group: report to the Scottish Government - gov.scot \(www.gov.scot\)](https://www.gov.scot/publications/fireworks-legislation-impacts-international-evidence-review/)

<sup>18</sup> <https://www.gov.scot/publications/fireworks-legislation-impacts-international-evidence-review/>

<sup>19</sup> Evaluation of Firework Related Harm, 2020

<sup>20</sup> NHS Greater Glasgow and Clyde (GGC) NHS Health Board provide medical care for the population of 1.2 million people.

<sup>21</sup> Evaluation of Firework Related Harm, 2020

61. However, there have been reported incidents of pyrotechnic article misuse leading to injury, and many more near-misses recorded. Police Scotland has expressed concerns that it is a matter of when, not if, a death occurs in Scotland due to their misuse (something that has been seen in other countries) and an escalation in the recklessness with which they are being used (for example, being thrown deliberately at people, or into a crowd). A number of data sets and specific incidents relating to firework/pyrotechnic article misuse at music events, football matches and other gatherings provide evidence of the need for further legislation:

- Between the start of the 2013-14 Scottish Football Season and the first quarter of the 2021-22 season to date, there have been 431 football matches in Scotland where the use of pyrotechnic articles was recorded by police. This is based on information provided by Police Scotland. This figure only refers to the number of matches which had a police presence and where pyrotechnic articles featured, rather than the number of individual pyrotechnic articles observed, which is likely to be higher due to multiple pyrotechnic articles used at the same match. Additionally, season 2019-20 was curtailed before the high profile season-ending matches took place, likely leading to lower than average number recorded.
- Of the matches where pyrotechnic articles were observed, the percentage which involved pyrotechnic articles outside the venue is noteworthy, as these are incidents where it is likely the circumstances mean that no offence or search power currently exists to intervene. In the 2018-19 season (the last season not curtailed or impacted by COVID-19 restrictions), 44 per cent of these incidents were observed outside the venue.
- Police Scotland match reports indicate that between the start of the 2013-14 Scottish Football Season and the first quarter of the 2021-22 season to date a total of 145 people have been arrested in relation to pyrotechnic articles at football, spread between home and away supporters and across incidents inside and outside venues.

## Part 7: General provisions

62. Part 7 of the Bill includes a requirement on the Scottish Ministers to lay a report before the Scottish Parliament on the operation of the Act within 5 years of the Act receiving Royal Assent. It specifies that this must include information on: incident data; the views and experiences of communities, as well as proceedings and convictions data for:

- an offence under the Bill.
- an offence under either the Fireworks Act 2003 or regulations made under it.
- the Pyrotechnic Article (Safety) Regulations 2015.
- the Explosives Substances Act 1883.
- the Explosives Act 1875.

This document relates to the Fireworks and Pyrotechnic Articles (Scotland) Bill (SP Bill 10A) as amended at stage 2

63. This does not include a requirement to report on any other offences where the misuse of fireworks or pyrotechnics has been a factor. This is because the only way of obtaining this information would be a manual search of case records by Crown Office or Court Service. This method would be extremely time consuming and would be unlikely to provide robust data (e.g. due to misspellings in free text, information not being recorded in the case notes, etc.)

64. Information in relation to the views and experiences of communities will be gathered via appropriate and valid methodologies.

65. The reporting period is set at 5 years from the day of Royal Assent. Given it is expected that the provisions will come into force over the first two years following Royal Assent, this provides 3 years in which to gather the required information and monitor and report on any change. Working on the assumption that Royal Assent is received over the summer of 2022, this would require the Scottish Ministers to lay a report on operation of the Act in 2027.

66. It is assumed that the majority of the costs will be associated with gathering information on the views and experiences of communities and that these costs would most likely fall over 2025/26 (Year 4) and 2026/27 (Year 5). It is difficult to estimate the likely costs of gathering this information, partly because costs will be informed by a full outline of the requirements of any information gathering that takes place (including, for example, the research method that is employed, the number of people/communities involved, the analysis that is required) and partly because it is difficult to predict the likely cost of such activity in 2025/26 and 2026/27. For the purposes of this Financial Memorandum, it is expected that costs for the community research could fall between £50,000 and £100,000 depending on the scope of the work required. This estimate is based on other research projects commissioned by Justice Analytical Services.

## Costs, savings and changes to revenue for local authorities

67. This section sets out the estimated costs for local authorities, as informed by the Scottish Government and Local Authority Short Life Working Group. It covers the additional responsibilities that will be conferred on local authorities for: enforcement of Part 2 licensing requirements in relation to commercial firework supply; enforcement of Part 3 restrictions on the supply and use of fireworks and pyrotechnic articles; and considering and designating firework control zones under Part 4, including costs for scoping, establishing, and monitoring the impact. It is not anticipated that there will be any significant savings or changes to revenue for local authorities.

68. For the purposes of this Financial Memorandum, the costings are based on the assumption that Part 3 (restrictions on supply and use) will commence in late 2022-23 at the earliest, and Part 2 (enforcement in relation to the licensing system) and Part 4 (Fireworks Control Zones) from late 2023 at the earliest.

## Part 2 and Part 3 Fireworks licensing and restrictions on supply and use

69. Enforcement responsibility will be undertaken by Trading Standards in respect of the commercial supply of fireworks to persons without a licence (Part 2) and the restricted days of sale of fireworks (Part 3). The following are estimated costings for Local Authority Trading Standards services to enforce these provisions. Trading Standards will undertake effective interventions in various ways to ensure compliance; and these typically involve a variety of collaborative approaches, such as advising businesses of their obligations and giving assistance to comply, combined with formal enforcement action where required. Activities include:

- Proactive physical inspections of premises and giving detailed and specific advice.
- Investigations into intelligence (e.g. from consumer complaints or anonymous “tip-offs”) suggesting that breaches have occurred.
- Covert “test purchase” visits to premises to check, for example, whether the licensing provisions are being implemented in practice during sales by businesses.
- Responses to specific requests for advice from businesses.
- General guidance materials produced for businesses.
- Media work to educate consumers, businesses, and others, about good practice.
- Seizure of goods, issuing of formal notices and reporting to the Procurator Fiscal for prosecution.

70. The main cost for these provisions is Trading Standards Officer time to carry out these activities and the associated preparation and support tasks. The estimated cost used for the purposes of this Financial Memorandum is £400 per officer day. This is an established figure and additional costs are adapted from previously accepted use elsewhere including for the 2021 Fireworks Enforcement Programme agreed between Scottish Government and SCOTSS.

71. The other potential costs included are:

- Test purchasing (price of items purchased).
- Storage and disposal (fireworks are explosives and require specialist handling).
- Officer training on the new provisions and procedures.
- National coordination by SCOTSS, including collation of results, liaison with other agencies, financial management and full reporting on activities and outcomes.
- A programme of advice and enforcement in relation to online sales.

72. The costings are based on options for three levels of activity to regulate in-person shop sales: Basic, Enhanced and Comprehensive.<sup>22</sup> Basic is only “reactive” activities, including investigation of cases on the basis of good intelligence suggesting significant non-compliance and responses to requests from local businesses for advice. Enhanced activities include Basic plus visits to a sample of premises for routine inspections and test purchases; investigation of some cases based on weaker intelligence; and proactive publicity. Comprehensive activities include all the above plus direct engagement with most relevant premises to advise on and check compliance; an extensive covert test purchase programme to check compliance; written guidance for businesses and local publicity and media campaign to inform businesses, consumers and others. Costs for online enforcement are estimated separately and assumed to be combined with any of the three levels of activity. The online enforcement includes sales from both inside Scotland and from external sources to buyers in Scotland.

73. It is intended Part 3 will be in force in 2022-23, and therefore estimated costs for this are included from Year 1. The costing for Part 2 is from Year 2 at the earliest. From Year 3 onwards, the intention is that traders should be aware of the requirements and therefore that enforcement can be maintained with less enhanced resources (Table 14). A summary of the costings per year is:

- Year 1: Costs may range from £57,000 (under the basic level of activity) through to £132,000 (under the comprehensive level of activity).
- Year 2: Costs may range from £69,000 (under the basic level of activity) through to £193,200 (under the comprehensive level of activity).
- Year 3: Costs are estimated at £41,000 for a reduced programme of activities.

74. The Year 2 figures involve enforcing Parts 2 and 3 of the Bill in tandem and are less than the sum of the costs of enforcing the two in isolation. For example, during an overt inspection visit in Year 2, both provisions could be checked and discussed in the same visit. While this would result in a longer (and costlier) visit than dealing with just one of these provisions, it would take less than twice the time, and some costs are the same for both scenarios (i.e. checking one and both provisions), such as travel time.

---

<sup>22</sup> In Year 1 the higher figure is based on an average of seven officer days per local authority, while the lower figure is based on one officer day by local authority; in Year 2 the higher figure is based on an average of 11 officer days per local authority, while the lowest figure is based on two officer days.

Table 14 Costs for firework supply enforcement Part 2 & 3 Years 1 - 3

Trading Standards	Year 1	Year 2	Year 3
	Part 3	Part 2 & 3	
Comprehensive	£108,200	£169,200	
Enhanced	£80,200	£124,200	
Basic	£33,000	£45,000	
Online	£24,000	£24,000	
Ongoing			£41,000
<b>Range: basic + online</b>	<b>Min £57,000</b>	<b>Min £69,000</b>	<b>£41,000</b>
<b>Max: comprehensive + online</b>	<b>Max £132,200</b>	<b>Max £193,200</b>	

### Part 3: Firework control zones

75. Local authorities will have powers to designate areas where it is not permitted for fireworks to be set off by the general public. The costs for local authorities will be to scope, establish and to review the operation and effectiveness of any such designated zones.

76. Local communities will have a key role in influencing firework control zones which are intended to target the problematic use of fireworks, where this is occurring in an unpredictable way and impacting on communities. The intended and expected effect of a firework control zone is to contribute to the reduction in the use of fireworks overall and therefore the associated noise and disturbance.

77. The majority of costs for local authorities will be staffing costs associated with scoping, establishing and reviewing the operation and effectiveness of firework control zones. Designating a firework control zone will have a number of mandatory requirements including consulting with local communities and relevant public sector authorities, taking the views of these groups into account when considering and authorising such zones, and carrying out reviews of the operation and effectiveness of its firework control zones. Where a zone is designated, the local authority will be required to adhere to such conditions as Scottish Ministers may require, for example setting out size, location, length of time for control of fireworks and communicating this to relevant people.

78. The assumptions and figures used to estimate costs were informed by the Scottish Government and Local Government Short Life Working Group. This provided information and estimates on the costs and the number of local authorities likely to designate areas as a firework control zone. The costings include setup costs and fixed costs for consultation, contingency for additional costs that may arise and communication of the consultation and decision on designation, per zone. The majority of the costs are to scope and set up a firework control zone. This is mainly a one-off cost, although if an authority undertakes a review of the operation and effectiveness of a zone in conjunction with a proposal to amend or revoke a zone, the same process in relation to consultation and communication would apply, and therefore incur similar costs as those outlined in Table 15.



Table 15 Firework control zone local authorities costs to scope and establish

Local authority costs	Per zone
Staff*	£6,913
Consultation	£360
Communications	£920
Contingency	£1,000
Set up costs	£15,000
<b>Total 1 Zone</b>	<b>£24,193</b>

\*Staff costs are based on 0.7 FTE mid-point of a Band 6 post with on costs, £6,913.

79. Drawing on current experience from local authority officers, it is assumed for the purposes of this Financial Memorandum that a few local authorities (primarily large urban) may designate a number of zones in their area, a small number of authorities may designate a single zone in their area, and the majority are unlikely to designate any zones. For this Financial Memorandum estimates have been made on two possible scenarios which provide estimates of the range of local authorities that may designate firework control zones:

- Scenario 1 “Multiple Use” – A number of Firework Control Zones designated by local authorities:
  - Year 2: Low use of zones: three zones in three local authorities (a total of nine zones); High use of zones: three zones in five local authorities (a total of 15 zones).
  - Year 3: Low use of zones: three zones in one local authority (a total of three zones); High use of zones: three zones in three local authorities (a total of nine zones).
- Scenario 2 “Single Use” – A single Firework Control Zones designated by local authorities:
  - Year 2: Low use of zones: one zone in five local authorities (a total of five zones); High use of zones: one zone in ten local authorities (a total of 10 zones).
  - Year 3: Low use of zones: one zone in three local authorities (a total of three zones); High use of zones: one zone in five local authorities (a total of five zones).

80. For low use of zones in each year, the low numbers from Scenario 1 “Multiple use” and Scenario 2 “Single use” are added together and, similarly, for the high use of zones from each scenario. The total costs for Years 2 and 3 based on the low estimate is £366,867 and the total costs for Year 2 and 3 based on the high estimate is £710,540 (Table 16).

Table 16 Estimated costs for firework control zones (FCZ) based on low and high numbers of designations

Number zones	Year 2		Year 3		Total (Year 2 and 3)	
	Low	High	Low	High	Low	High
Scenario 1 (3 FCZ)	£127,740	£212,900	£44,080	£132,240	£171,820	£345,140
Scenario 2 (1 FCZ)	£120,967	£241,933	£74,080	£123,467	£195,047	£365,400
<b>Total</b>	<b>£248,707</b>	<b>£454,833</b>	<b>£118,160</b>	<b>£255,707</b>	<b>£366,867</b>	<b>£710,540</b>

81. The Scottish Government and Local Authority Short Life Working Group identified there will also be some administrative costs generated by the Bill, including updating the Public Entertainment Licensing resolutions or Schemes of Governance as required by individual local authorities, but anticipated these to be minimal.

## Costs, savings and changes to revenue for other bodies, individuals and businesses

### Costs to Police Scotland

82. This section sets out Police Scotland's estimated costs for the Parts of the Bill for which they will have responsibility for enforcing. Police Scotland were involved in informing the Financial Memorandum and provided costing figures. While the Bill creates a number of new offences related to different elements of the Bill, it is anticipated there will be greater costs involved for Police Scotland in relation to Part 2 (licensing) given the possibility of manual input of data, and for Part 4 (firework control zones) where more proactive enforcement will be required given the nature of such zones. This section therefore considers costs for Parts 2 and 4 of the Bill below. The costs outlined are not in relation to investigating potential breaches of the new offences created by the Bill, including for Parts 3 and 5, as it is envisaged that this will be met under Police Scotland's general enforcement role. Police Scotland does not routinely record the general costs involved for any specific operation as the nature of policing necessitates that officers are deployed to wherever their services are most required. The division to which individual officers or staff belong meet the cost of their core time and so there is no requirement to maintain a record of the cost of any particular duty carried out. Consequently in this Financial Memorandum general enforcement along with any requirements for the production of guidance and the development of officer training in relation to the new offences are expected to be incorporated into normal duties and not incur additional costs.

This document relates to the Fireworks and Pyrotechnic Articles (Scotland) Bill (SP Bill 10A) as amended at stage 2

83. Data from Police Scotland indicates that around 900 ‘firework’ related incidents were reported in the 2019-20 firework period.<sup>23</sup> Police Scotland estimate the costs of covering 4 and 5 November in 2019 was approximately £98,000. There are also unquantified costs to Police Scotland from attacks on their officers, particularly during the firework period. The data available in relation to attacks on emergency service workers shows that between 2013-14 and 2019-20, there has been a 12% increase in the number of assaults on police officers during the firework period, which is in line with the figures across the whole year (up 11%).

84. As set out in the section on “Crown Office and Procurator Fiscal Service and Scottish Courts and Tribunals Service” above, it is estimated that there will be some rise in prosecutions in the first three years. The current number of charges and cases start from a low base and the estimated increases in prosecutions is five per year for Part 3 from Year 1; eight between Year 1 and 2 for Part 5 and then levelling off; between three and five for Part 2; and eight for Part 4 Year 3 the first year of operation.

## Part 2: Fireworks licensing

85. For this Financial Memorandum, for Part 2 (licensing), it is anticipated that the earliest possible point this will be in operation is from late Year 2 (2023-24). Police Scotland will be able to check if a relevant person has a firework licence and the aim is for this to be an automated system that will utilise the fireworks licence system and register of licence holders to share data with Police Scotland in real time.

86. For this Financial Memorandum the costs of a manual arrangement are included should the automated system not be achieved in time. The costings are based on Police Scotland operation of the established “Inn Keeper” licensing system.

87. The main cost will be inputting relevant data in respect of fireworks licences onto the Police Scotland system by a Police Constable (PC) and a member of staff (at Grade 3 (total comprising salary and employer costs in 2020) £24,339 - £26,594). In line with existing processes for licensing, tasks are likely to involve: creation of a new person record populated with all relevant information (e.g. name, address, date of birth, contact details); creation of application records; reviewing applications and expiry dates; updating as required to comply with General Data Protection Regulation (GDPR).

88. As set out above for Costs, Savings and Changes in Revenue to the Scottish Administration for Part 2 Fireworks Licensing (from paragraph 13), the application process set up and operation is costed over three years, with the majority of costs falling in Year 2.

---

<sup>23</sup> [Firework Review Group: report to the Scottish Government - gov.scot \(www.gov.scot\)](https://www.gov.scot/resources/documents/2021/07/Firework_Review_Group_report_to_the_Scottish_Government.pdf)

89. Police Scotland estimated costs using their assessed number of hours for a Police Officer and Police required. For high demand reduction and low number of applications, the Police Officer annual cost is estimated at £58,262 (total of £174,785 for three years) and Police Staff time £47,961 annual (total £143,883 over three years). For low demand reduction, high number of applications Police Officer time annual cost is £174,811 (a total of £524,435 over 3 years) and Police staff time £143,905 (a total of £413,714 over 3 years). For the first three years of operation of the licensing system, the estimated range for total cost is: for a high demand reduction scenario, so fewer licence applications, is £318,668 to low demand reduction scenario £956,149 (Table 17).<sup>24</sup>

Table 17 Police Part 2 Fireworks Licensing - Manual\*

	Years 1-3		
	High Demand Reduction	Medium Demand Reduction	Low Demand Reduction
Police Officer	£174,785	£349,650	£524,435
Police Staff	£143,883	£287,831	£431,714
<b>Total</b>	<b>£318,668</b>	<b>£637,481</b>	<b>£956,149</b>
<b>Average annual costs</b>	<b>£106,223</b>	<b>£212,494</b>	<b>£318,716</b>

\*The aim is to have an automated system.

## Part 4: Firework control zones

90. Police Scotland will also enforce firework control zones where these are established. While the Bill confers a power for the Scottish Ministers to make further provision, by regulation, in order for a firework control zone to be validly established (such as requirements in relation to the size, location, boundary of the zone, length of time for which the designation is to be in place for) local authorities will have discretion to apply their own approaches to these designations to reflect local circumstances. This means the likely cost to Police Scotland in enforcing such zones will vary and be determined, in part, by the circumstances in which it has been designated.

91. For the purposes of estimating costs for this Financial Memorandum, the costs associated with designating and enforcing dispersal orders<sup>25</sup> have been considered. While there are many clear and notable differences between firework control zones and dispersal orders – in terms of prevention of offences, planning, and operation – it does provide a useful comparison in terms of estimated officer numbers and associated costs.

<sup>24</sup> Unlike other elements of the financial memorandum, these figures have not yet been updated to reflect the revised illustrative analysis assumption, as described in paragraph 18, that F2 and F3 sales account for the full proportion of the 250,000 total retail sales of fireworks.

<sup>25</sup> <https://www.gov.scot/publications/guide-antisocial-behaviour-etc-scotland-act-2004/#3>

This document relates to the Fireworks and Pyrotechnic Articles (Scotland) Bill (SP Bill 10A) as amended at stage 2

92. It is envisaged that firework control zones are likely to be in place for significantly longer periods of time than dispersal orders; but there may be specific periods (such as bonfire night) when more active enforcement will be required. Therefore, for the purposes of this Financial Memorandum, costings are based on a shift to cover a single specific period.

93. The costs outlined below are based on the average day rate for Police Officers (by rank), excluding overtime, and based on lower (16) and higher (27) officer numbers. In reality, the costs outlined in this Financial Memorandum are likely to be opportunity costs – that is, the cost of officer time that could otherwise have been allocated elsewhere. For the purposes of this Financial Memorandum, however, they are treated as additional, rather than opportunity costs.

94. In order to provide estimates, the cost of one shift has been used, whilst recognising in reality this is likely to be a proportion of time across several shifts. The cost per shift for one dispersal order based on lower officer numbers is £3,380.93 (1 Police Inspector: £299.76; 2 Police Sergeants: £481.30; 13 Police Constables: £2,599.87). The costs per shift for higher officer numbers is £5,621.48 (1 Police Inspector: £299.76; 3 Police Sergeants: £721.95; 23 Police Constables: £4,599.77). Applying an average of these costs (£4,501.21) to enforcing one firework control zone over a specific period provides an indication of what the likely cost may be of intensively enforcing a designated zone over a particular period.

95. As with the estimated costings for local authorities managing the designation of firework control zones, outlined in paragraphs 75 to 81, it is assumed that some local authorities may have multiple zones within their area, a small number may designate a single zone within their area, and the majority may not designate any zones.

96. Based on these scenarios, the potential costs for Police Scotland are a minimum of £47,334, for lower police numbers, number of zones and local authorities using zones. The maximum estimate is £140,537 (all higher estimates) for Year 2 – the first year of their operation. For Year 3, costs are estimated to be between £20,286 (low estimate) to £78,701 (high estimate), for subsequent years of operation (Table 18 and Table 19 below).

Table 18 Estimated police costs, based on lower higher officer numbers for high and low number of firework control zones and local authorities from Year 2

Police costs (based on lower officer numbers)	Year 2		Year 3	
	Lower no of local authorities*	Higher no of local authorities	Lower no of local authorities	Higher no of local authorities
Scenario 1 (3 FCZ)	£30,429 (3)	£50,715 (5)	£10,143 (1)	£30,429 (3)
Scenario 2 (1 FCZ)	£16,905 (5)	£33,810 (10)	£10,143 (3)	£16,905 (5)
<b>Total National</b>	<b>£47,334</b>	<b>£84,525</b>	<b>£20,286</b>	<b>£47,334</b>

\*Total Number of local authorities using Firework Control Zones

Table 19 Estimated police costs, based on higher officer numbers for high and low number of firework control zones (FCZ) and local authorities from Year 2

Police costs (based on higher officer numbers)	Year 2		Year 3	
	Lower no of local authorities*	Higher no of local authorities	Lower no of local authorities	Higher no of local authorities
Scenario 1 (3 FCZ)	£50,593 (3)	£84,322 (5)	£ 16,864 (1)	£50,593 (3)
Scenario 2 (1 FCZ)	£28,107 (5)	£56,215 (10)	£16,864 (3)	£28,107 (5)
<b>Total</b>	<b>£78,701</b>	<b>£140,537</b>	<b>£33,729</b>	<b>£78,701</b>

97. In an area designated as a firework control zone professional firework operators will only be permitted to be engaged for the purposes of a public firework display, and private professionally organised displays will not be permitted to take place. This is likely to impact on professional firework operator businesses, although no firm data has been secured in relation to the number of professional firework operators in Scotland nor the proportion of such businesses that relate to private displays as compared to public displays. The impact will also be heavily dependent on the number of firework control zones that are put in place and their duration.

98. Some data exists, from a survey carried out in 2019 via the Scottish Local Authority Lawyers and Administrators (SOLAR), on the number of organised displays that take place in Scotland. This shows that, among the 22 local authorities that responded, most have between 1 and 5 large and small scale organised displays within their local area, and that the vast majority are organised by a community group, community organisation or other local organisation such as scout groups, sports clubs etc. It was not possible, from the survey, to determine what proportion of these displays were carried out by professional firework operators.

99. It has therefore not been possible to provide any financial estimates of the impact of firework control zones on professional firework operators. This provision is also likely to have an impact on other businesses such as hotels and events venues, although it is expected that these impacts would be on an individual/area level rather than industry-wide.

## Part 5: Pyrotechnic articles in public places and at certain places or events

100. Police Scotland recording systems currently do not allow for a single statistical search for illicit use of pyrotechnic articles and therefore statistical evidence informing the resource implications as part of the development of the new offences has been collated from a range of sources, including information provided by Police Scotland.

101. While crime data can provide a picture of the general prevalence of pyrotechnic article misuse at events, albeit in circumstances where legislation already exists to deal with it, it cannot, of course, indicate incidents where additional police powers could have been applied had they been in existence at that time. Therefore, any additional costs to police as a result of their enforcement of the new possession offences can only be an estimate based on the best information available.

102. It is anticipated that any additional cost to Police Scotland to enforce the pyrotechnic possession offences within the Bill will be minimal. It is expected that the detection and enforcement of possession offences will generally take place as part of an existing policing operation at designated venues, events, public gatherings and assemblies, where misuse most often occurs and where the risk to public safety is greatest. Whereas currently Police Scotland can only act if an individual has been searched upon entering a sports ground and has been found with a pyrotechnic article, or when the pyrotechnic article has been illegally deployed at a sports ground, music event, or other event or public gathering, the new offences will provide constables with the power to intervene at an earlier stage, reducing the public safety risk but not significantly increasing the policing operation involved.

103. Additionally, as it is likely that the new offence will supersede section 20 of the Criminal Law Consolidation (Scotland) Act 1995 (an offence to possess a pyrotechnic article or firework at a designated sports ground), police incidents and charges currently dealt with under that legislation may come under the new offence.

104. For larger events, Police Scotland often use enhanced custody arrangements to ensure quick processing and minimal abstraction of officers from the event footprint. This ensures that, should a number of arrests be made under the new offence at a single event, there is minimal impact on the policing of the event.

This document relates to the Fireworks and Pyrotechnic Articles (Scotland) Bill (SP Bill 10A) as amended at Stage 2

105. In providing a stop and search power for police to intervene at an earlier stage in a public place it is anticipated that offences that are currently dealt with under the Explosives Substances Act 1883 or the Explosives Regulations 2014, or through a charge of Culpable or Reckless Conduct, can be prevented and dealt with under the new possession offence. It is also anticipated that the new possession offences will act as a deterrent to those who may currently risk carrying a pyrotechnic to misuse in public.

## Costs, savings and changes to revenue for the Fireworks Industry

106. There may be a reduction in members of the public purchasing fireworks as a result of the Bill provisions, affecting the value of sales and employment in retail relating to the fireworks industry.

107. Data from the British Fireworks Association (BFA) suggests that an estimated 334 people are employed in fireworks retail in Scotland.<sup>26</sup> This comprises: 25 people being directly employed in the wholesale of fireworks; 40 seasonal employees in wholesale; 19 seasonal employees in the delivery of fireworks; and 251 seasonal employees in the retail of fireworks. These figures have been estimated by the BFA through a series of calculations such as using the percentage of the overall UK employment and the percentage of product which goes into the UK to calculate how many people are directly employed in wholesale. Whilst this provides an estimate, it does not give a robust picture of the number of people employed in the retail of fireworks in Scotland. It is not clear if the wholesale and retail sector and/or the sale and use of fireworks in Scotland is proportionate to the rest of the UK; hence the calculations here are merely illustrative.

108. The data on premises licensed to sell fireworks is that these are mainly large supermarkets (70%); then smaller independent stores (18%); pop up shops (9%) and firework specific stores (3%). The nine specialist firework retailers the Scottish Government are aware of, who are licensed to sell fireworks all year round, have stated that they are likely to be significantly impacted by this Bill.

109. The Scottish Government's illustrative scenario analysis which estimates what might happen to the demand for fireworks and retail sales on introduction of the Bill provisions, under various demand reduction scenarios, was first discussed in Part 2 - Fireworks licensing. This is because it is essential to understand the demand for fireworks in order to understand the demand for fireworks licences. However, it is important to note that this illustrative analysis is intended to cover all the elements of the Bill – and not just the introduction of licensing. This section goes over the results of that illustrative analysis, looking at the impact of (all elements of) the Bill on the demand for fireworks in Scotland and therefore the volume of fireworks sales in Scotland. A more detailed discussion of the methods used can be found in paragraphs 16 to 23, with a brief summary provided below.

---

<sup>26</sup> [Firework Review Group: report to the Scottish Government - gov.scot \(www.gov.scot\)](http://www.gov.scot)



110. The starting point for this analysis is the statement from the Fireworks Review Group report that there are around 250,000 total retail sales of fireworks annually,<sup>27</sup> together with industry intelligence that the estimated average cost of a fireworks sale is in the order of £50.<sup>28</sup> The analysis then assumes that 100% of these sales relate to F2 and F3 fireworks. Illustrative modelling of the impact of the Bill itself is very broad due to the lack of data to draw on about the likely impacts of the measures included with the Bill. The main “change” anticipated as a result of the Bill is analysed via an assumption about how much demand for F2 and F3 fireworks will be reduced by. Broad assumptions about a low impact (25%), medium impact (50%) and high impact (75%) scenario for the reduction in demand for fireworks are then applied in order to assess how much of the existing sales revenue will remain after the impacts of the Bill are felt. Finally, broad assumptions are also used to model possible displacement of sales from registered retailers in Scotland to sources that are illegal, e.g. black market sales, for the firework provisions across the Bill – a full discussion of the evidence around this can be found in paragraph 21. Due to this evidence suggesting that the levels of displacement would be low, this is modelled as a 1% impact (low impact scenario), 2% impact (medium impact scenario) or a 5% impact (high impact scenario). The effects of these two factors are then combined to give illustrative results.

111. Based on this illustrative analysis, it is estimated that the introduction of the combination of firework related measures within the Bill, along with potential displacement, could reduce total sales income for F2/F3 fireworks by a significant amount. However, due to the lack of available data and the need to employ very broad assumptions as a result of this, the range of possible outcomes produced by the model is very large – with a reduction in sales estimated to be between £3.2m (in a low impact scenario for demand reduction and displacement) and £9.5m (in a high impact scenario for demand reduction and displacement). The results are summarised in Table 20. While information is available on the number of retailers who are currently licensed to sell fireworks, without further information and data on sales from industry and retailers, it is not possible to assess what proportion of the possible reduction would apply to large supermarkets, smaller independent shops, pop-up shops or fireworks specific shops.

---

<sup>27</sup> <https://www.gov.scot/publications/firework-review-group-report-scottish-government/documents/>

<sup>28</sup> This estimate was provided by the British Fireworks Association during the work of the Fireworks Review Group.

Table 20 Illustrative estimated demand for fireworks and retail sales under demand reduction and displacement scenarios

	Scenario		
	Low impact	Medium impact	High impact
<b>Estimated annual sales before the introduction of the Bill</b>			
Estimated volume of F2/F3 fireworks sales before the Bill	250,000	250,000	250,000
Estimated value of F2/F3 fireworks sales before the Bill	£12,500,000	£12,500,000	£12,500,000
<b>Illustrative estimates of impact of reduction in demand and subsequent displacement of sales</b>			
Amount demand is reduced by as a result of Bill	25%	50%	75%
Reduction in demand (volume of sales)	62,500	125,000	187,500
Reduction in demand (value of sales)	£3,125,000	£6,250,000	£9,375,000
Increase in displacement (% of remaining sales)	1%	2%	5%
Increase in displacement (volume of sales)	1,875	2,500	3,125
Increase in displacement (value of sales)	£93,750	£125,000	£156,250
<b>Illustrative estimates of annual sales after the impacts of the Bill</b>			
Remaining sales (volume)	185,625	122,500	59,375
Value of remaining sales	£9,281,250	£6,125,000	£2,968,750
<b>Total illustrative estimates of (annual) changes as a result of the Bill</b>			
Change in volume of sales due to Bill	-64,375	-127,500	-190,625
Change in value of sales due to Bill	-£3,218,750	-£6,375,000	-£9,531,500

112. It may be the case that some fireworks purchasing patterns will move in line with a changing culture around fireworks, with a transition from more purchases being made by individuals to more purchases made for public displays by community groups. Whilst this may mitigate some of the loss in sales, it has not been possible to quantify this. The table above also does not include any information about the demand for and revenues relating to F1 and F4 fireworks, which could also change as a result of the Bill. Without further data on sales, it has not been possible more accurately predict the economic impact on retailers overall and for specific types of retailers; hence, the illustrative estimates provided in this Financial Memorandum. As outlined in paragraph 97 to 99, given that professional firework operators will not be permitted to be engaged for private displays in areas designated as firework control zones, there is likely to be an impact on professional firework operator businesses; although it has not been possible to provide any estimates in this regard. However, such businesses will be able to continue to be engaged for public firework displays in firework control zones.

## Summary of costs, savings and changes in revenue in The Bill

Table A: Total estimated maximum and minimum costs to the Scottish Administration, Local Authorities and Police Scotland Years 1 -3

Year 1		Year 2		Year 3		Total Years 1-3	
Min	Max	Min	Max	Min	Max	Min	Max
£913,711	£2,231,405	£931,937	£2,341,084	£494,783	£983,132	£2,340,431	£5,555,621

Table B: Estimated Year 1 revenues from firework licensing, assuming 75% of possible applicants apply for a licence – low and high impact scenarios

	Low Impact Scenario	High Impact Scenario
Revenue from £20 fee	£2,784,000	£891,000
Revenue from £30 fee	£4,177,000	£1,336,000
Revenue from £50 fee	£6,961,000	£2,227,000

Table C: Estimated revenues from firework licensing over 5-year period – low, medium and high impact scenarios

	Scenario		
	Low Impact	Medium Impact	High Impact
Revenue from £20 fee	£3,713,000	£2,450,000	£1,188,000
Revenue from £30 fee	£5,569,000	£3,675,000	£1,781,000
Revenue from £50 fee	£9,281,000	£6,125,000	£2,969,000

This document relates to the Fireworks and Pyrotechnic Articles (Scotland) Bill (SP Bill 10A) as amended at Stage 2

Table D: Estimated maximum and minimum costs to the Scottish Administration, Local Authorities and Police Scotland Years 1 -3

	Year 1		Year 2		Year 3	
	Min	Max	Min	Max	Min	Max
<b>Scottish Government</b>						
Part 2 Fireworks Licensing	£675,489	£1,675,489	£354,673	£1,098,798	£67,114	£117,008
Parts 2 – 5	£45,000	£45,000	£55,000	£55,000	£72,000	£72,000
<b>COPFS &amp; SCTS</b>						
Parts 2 – 5	£30,000	£60,000	£51,000	£80,000	£70,000	£100,000
<b>Total Scottish Admin</b>	<b>£750,489</b>	<b>£1,780,489</b>	<b>£460,673</b>	<b>£1,233,798</b>	<b>£209,114</b>	<b>£289,008</b>
<b>Local Authorities</b>						
Part 2 and Part 3	£57,000	£132,200	£69,000	£193,200	£41,000	£41,000
Part 4	£0	£0	£248,707	£454,833	£118,160	£255,707
<b>Total Local Authorities</b>	<b>£57,000</b>	<b>£132,200</b>	<b>£317,707</b>	<b>£648,033</b>	<b>£159,160</b>	<b>£ 296,707</b>
<b>Police Scotland</b>						
Part 2 Fireworks Licensing	£106,223	£318,716	£106,223	£318,716	£106,223	£318,716
Part Police Scotland FCZ	£0	£0	£47,334	£140,537	£20,286	£78,701
<b>Total Police Scotland</b>	<b>£106,223</b>	<b>£318,716</b>	<b>£153,557</b>	<b>£459,253</b>	<b>£126,509</b>	<b>£397,417</b>
<b>Total</b>	<b>£913,711</b>	<b>£2,231,405</b>	<b>£931,937</b>	<b>£2,341,084</b>	<b>£494,783</b>	<b>£983,132</b>

Table E: Illustrative annual potential revenue loss to firework retailers

	Low Impact Scenario	High Impact Scenario
Potential revenue loss	£3.2m	£9.5m

This document relates to the Fireworks and Pyrotechnic Articles (Scotland) Bill (SP Bill 10A) as amended at Stage 2

# Fireworks and Pyrotechnic Articles (Scotland) Bill

## Revised Financial Memorandum

© Parliamentary copyright. Scottish Parliamentary Corporate Body

Information on the Scottish Parliament's copyright policy can be found on the website - [www.parliament.scot](http://www.parliament.scot)

Produced and published in Scotland by the Scottish Parliamentary Corporate Body.

All documents are available on the Scottish Parliament website at: [www.parliament.scot/documents](http://www.parliament.scot/documents)