

**Business and Regulatory Impact Assessment  
(Partial)**

# **Consultation on Fire and Smoke Alarms in Scottish Homes**

**Housing Sustainability Strategy Unit**

**September 2017**

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## 1. TITLE OF PROPOSAL

### CONSULTATION ON FIRE AND SMOKE ALARMS IN SCOTTISH HOMES

## 2. PURPOSE AND INTENDED EFFECT

### Background

On 14 June 2017 a major fire spread rapidly through Grenfell Tower, a 24 story residential high rise building in London, with at least 80 people losing their lives. Following the tragedy, the Scottish Government set up a Ministerial Working Group (MWG) to oversee a review of building and fire safety regulatory frameworks in Scotland. The MWG will be considering wider proposals for actions to reduce the risk of fire and will look at fire safety in other types of building (such as schools and hospitals). As a first step, the MWG agreed to prioritise this consultation on fire and smoke alarms, bringing forward proposals considered by the Common Housing Quality Forum and which had been intended for consultation later in 2018.

### Objective

In the year 2015-16 there were 5,673 fires in dwellings in Scotland, from which there were 39 fatalities and 1,045 non-fatal casualties.<sup>1</sup> While the number of fatalities varies from year to year, the data shows that over the last seven years the fatality rate in fires in dwellings which had an operational smoke alarm has been lower (5.9 deaths per 1,000 dwelling fires) than in dwellings without an operational smoke alarm (6.9).<sup>2</sup> The data also shows that some people, particularly older people, are more at risk.<sup>3</sup>

This consultation seeks views on possible changes to standards required for smoke and fire detectors in Scottish homes.

All new build housing in Scotland must have at least one smoke alarm installed in the room most frequently used for general daytime living purposes, one in every circulation space on each storey, one in every access room serving an inner room and at least one heat alarm installed in every kitchen. These must all be mains wired and interlinked.

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<sup>1</sup> Fire and Rescue Statistics, <http://www.firescotland.gov.uk/about-us/fire-and-rescue-statistics.aspx>. Of the 1,045 non-fatal casualties, 239 related to people being referred for pre-cautionary check-ups (see Table 2 at [http://www.firescotland.gov.uk/media/1009447/2015\\_16\\_fire\\_and\\_rescue\\_statistics\\_corrected\\_tables.xlsx](http://www.firescotland.gov.uk/media/1009447/2015_16_fire_and_rescue_statistics_corrected_tables.xlsx))

<sup>2</sup> See footnote 6 for more detail.

<sup>3</sup> In 2015-16, the fatality rate (excluding Scottish Fire and Rescue Personnel) from dwelling fires was 18.5 per 1 million for people aged 60 and above, compared with 8.4 per 1 million for the Scottish population as a whole; see Table 17 at [http://www.firescotland.gov.uk/media/1009447/2015\\_16\\_fire\\_and\\_rescue\\_statistics\\_corrected\\_tables.xlsx](http://www.firescotland.gov.uk/media/1009447/2015_16_fire_and_rescue_statistics_corrected_tables.xlsx).

Similarly, in the private rented sector there should be at least one functioning smoke alarm in the living room, one in every hallway and landing, a heat alarm in the kitchen, and all alarms should be hard wired and interlinked.

In the social rented sector, landlords are required to comply with the Scottish Housing Quality Standard (SHQS) which specifies that there must be at least one smoke detector present in the properties they rent to tenants. They can either be battery-powered or mains-powered but when replacement smoke detectors are being fitted they should be mains-wired.

There are no minimum requirements for smoke and fire detectors in owner occupied housing, but any property constructed under a building permit issued since 1993 will have been fitted with interlinked and hardwired smoke detector in circulation spaces.

It is recognised that the scope of existing standards for rented houses are linked to specific types of tenancies and some housing may fall between the gaps. It is also recognised that a minimum standard in owner occupied housing which is part a tenement or a block of flats should be considered.

A programme of work to harmonise different elements of housing standards across tenures is already underway. In light of the tragic fire at Grenfell Tower, this consultation concentrating on fire and smoke alarms in Scottish homes has been prioritised. The remaining non-fire-safety-related elements will be covered separately, in a subsequent consultation later in 2018.

## Rationale for Government Intervention

### **Imperfect Information**

An individual making a decision about whether or not it is worthwhile to install a fire alarm can face difficulties in obtaining and evaluating the relevant information. For example, it may be difficult for an individual to gather information about the likelihood of a fire affecting their property and about the impact which any fire could have on their health or property. These difficulties in accessing information may lead individuals to incorrectly conclude that the risks which fires pose to them do not merit the upfront monetary or hassle costs of installing alarms.

Furthermore, information about the appropriate types and correct quantity of alarms for a property can be complicated and leave individuals unsure as to whether they have the appropriate level of fire detection equipment. There is evidence to show that the source of information can heavily influence the weight given to this information during a decision making process. Government regulation supported by enforcement should allow individuals to be more confident that they are following guidance that will ensure that they are living in properties with adequate fire detection technology.

## Failures of Rationality

Empirical evidence shows that people tend to procrastinate and delay taking decisions that are likely to be in their long term-interests; and that people can have particular difficulty weighing up the impacts of factors which are spread over time<sup>4</sup>. In the case of making a decision of whether or not to install a fire alarm, people may find it difficult to weigh up the future benefits of detecting a fire, which may occur at any time over the lifetime of the alarm, against the cost of installing an alarm, which will be felt immediately. This complexity may lead individuals to incorrectly conclude that installing an alarm is not worthwhile. Furthermore, people often procrastinate when taking decisions which are in their long-term interests. As a result, people may put off thinking about whether they should install an alarm, or even where they have decided it is a good idea, they may fail to get around to actually installing the alarm. Regulation can play a key role in overcoming these inertia effects.

## Negative Externalities

It is possible for a fire which is started in one residential property to spread to neighbouring properties if not dealt with quickly. If a fire which started in a dwelling without a working fire alarm goes un-detected and spreads to neighbouring dwellings, this can have significant consequences for the residents of the neighbouring properties. In 2015-16, 7% (380) of dwelling fires spread beyond the room where they started to other parts of the building, which in the case of tenements and flats could have included neighbouring dwellings in the same building. A further 1% (68) of dwelling fires spread beyond the building.<sup>5</sup>

These negative consequences for neighbours increase the importance of the issues of imperfect information and failures of rationality mentioned above, since failures in decision-making affect not just those making the decision. Increasing the standard of regulation to ensure that there are effective fire and smoke alarms in all properties will therefore help to benefit not only the household directly concerned, but also their neighbours.

## 3. CONSULTATION

### Within Scottish Government

Following the Grenfell Tower Fire on 14 June 2017, the Scottish Government resilience committee was immediately convened and established the Ministerial Working Group to review Scottish fire safety and building regulations. The group first met on 20 June and continue meeting at regular intervals to steer progress in proposals for action to reduce the risk of fire in buildings in Scotland. The membership of the Building and Fire Safety Ministerial Working Group includes:

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<sup>4</sup> MINDSPACE – Behavioural Economics – Institute for Government (2010). Available [here](#).

<sup>5</sup> Table 22, at [http://www.firescotland.gov.uk/media/1009447/2015\\_16\\_fire\\_and\\_rescue\\_statistics\\_corrected\\_tables.xlsx](http://www.firescotland.gov.uk/media/1009447/2015_16_fire_and_rescue_statistics_corrected_tables.xlsx)

- Angela Constance MSP, Cabinet Secretary for Communities, Social Security and Equalities (Chair)
- Kevin Stewart MSP, Minister for Local Government and Housing
- Annabelle Ewing MSP, Minister for Community Safety
- Scottish Fire and Rescue Service
- Her Majesty's Fire Service Inspectorate
- Scottish Government officials, including representatives from:
  - Directorate for Housing and Social Justice
  - Directorate for Local Government and Communities
  - Directorate for Safer Communities

This first step to consult on fire safety in Scottish homes is led by the Housing Standards and Quality team within the Scottish Government. The consultation document has been developed in liaison with colleagues from Better Homes Division, Building Standards Division, Safer Communities Division, Civil Law and Legal System Division, and with support from colleagues in Communities Analysis Division.

#### Business / Stakeholders

A working group was established to provide stakeholders the opportunity to help inform and progress development of the draft consultation. It is chaired by the Scottish Government with representatives from COSLA, SFHA, CIH, ALACHO and GWSF attending. The group considered a range of issues and helped make decisions about the consultation's scope and recommendations contained therein. Views were also invited from representative bodies in the private rented sector and owner occupier sector.

#### Public Consultation

This BRIA will be published along-side the Consultation on Fire and Smoke Alarms in Scottish Homes. It will provide members of the public with the opportunity to submit comments during the consultation period. Comments received will inform how the proposals will be taken forward.

### **4. OPTIONS**

#### Do nothing option

The “do nothing” option would mean failing to take action to improve fire safety in Scotland's housing stock. Prior to the Grenfell Tower tragedy, work was already underway through the Common Housing Quality Standard Forum to harmonise housing standards across tenures, including safety elements such as fire and smoke alarm requirements in houses. This specific element has now been prioritised to help minimise the risk of fire in Scotland's homes.

## Other options

Several options are proposed in the consultation paper including:

- A. Applying a higher standard to social rented housing
- B. Applying a new standard to flats, irrespective of tenure
- C. Applying a new standard to flats only in high-rise buildings, irrespective of tenure
- D. Applying a new standard to all housing, irrespective of tenure

In each of these options, it is proposed that requirements are in line with the standard currently applicable to the private rented sector.

Current minimum standards in new build and private rented housing require mains wired alarms. This is because of the risk that alarms powered by disposable batteries will fail because batteries have expired or been removed. The consultation also seeks views on the option for types of sealed battery alarms where the battery lasts the lifetime of the unit and is built with a mechanism to alert the user that the alarm should be replaced. Allowing these types of alarms would reduce the cost and disruption associated with retrofitting mains powered alarms.

Views on each option are invited as part of the consultation process.

## Sectors and groups affected

Different proposals will affect different groups of people:

- If additional fire and smoke alarm requirements are included in the SHQS, all social housing providers and social tenants will be directly affected.
- If additional fire and smoke alarms are required in all tenements or blocks of flats, all owners and tenants living in tenements or blocks will be directly affected.
- If additional fire and smoke alarms are required in all tenements and blocks of flats over 18 metres tall, all owners and tenants living in such tenements and flats will be directly affected.
- If additional fire and smoke alarms are required in all houses, all householders, including owners and tenants will be directly affected.

Owners will incur costs if their current alarms fall short of the new regulatory minimum. Occupants (owner-occupiers and tenants) where fire and smoke alarms are installed will benefit from living in homes which are safer and at lower risk of fire than they were before the alarms were installed. Occupants of neighbouring dwellings will also benefit from the reduced risk of fires which spread to their homes.

## Benefits

### **Reduced Number of Fatalities and Serious Injuries**

While the number of fatalities varies from year to year, there is statistical evidence of a higher fatality rate for dwelling fires in Scotland where no operational smoke alarm was present. Over the seven years to 2015/16, there were 5.9 fatal casualties per 1,000 dwelling fires where there was no operational alarm, compared with 6.9 where there was an operational alarm.<sup>6</sup> This lower fatality rate is in line with the international evidence – a report by BRE Global for the Scottish Government found that a wide range of international literature supports the conclusion that the presence of an operational smoke alarm could reduce the risk of death by 50%.<sup>7</sup>

### **Reduced Costs to Scottish Fire and Rescue Service**

The quicker response time associated with an alarm should lead to a fall in the severity of fires to which the Scottish Fire and Rescue Service are called. This is expected to lead to a decrease in the amount of time and resources required from the Scottish Fire and Rescue Service, reducing costs.

However, this must be set against a possible increase in costs due to an increase in the number of false alarms to the Scottish Fire and Rescue Service. Over the period 2009-10 to 2014-15, there was a 29% increase in the number of false alarms due to the apparatus, although this was followed by a small decline in 2015-16.<sup>8</sup>

### **Reduction in Damage to Property**

The quicker response time due to an increase in the number of smoke and fire alarms is expected to lead to a reduction in the severity of fires, and, as a result, a decrease in the amount of damage caused to property as a result of fires. A UK Government report in 2004 estimated that the average amount of damage caused in a residential fire in the UK was £7,300.<sup>9</sup> If this figure were simply updated by inflation over the period, this estimate would be approximately £9,000 for 2016 (however, any improvements in fire-fighting technology since 2004 may have served to decrease this figure).

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<sup>6</sup> Scottish Government analysis of data from Table 19 in [http://www.firescotland.gov.uk/media/1009447/2015\\_16\\_fire\\_and\\_rescue\\_statistics\\_corrected\\_tables.xlsx](http://www.firescotland.gov.uk/media/1009447/2015_16_fire_and_rescue_statistics_corrected_tables.xlsx). Fires where there were operational alarms include fires where the smoke alarm operated and the Scottish Fire and Rescue Service were contacted and fires where the alarm operated and the Scottish Fire and Rescue Service were not contacted, while fires where there was no operational alarm include fires where no alarm was present and fires where an alarm was present but failed to operate. Fires where it is unknown if a smoke alarm was present are excluded from the analysis.

<sup>7</sup> BRE Global Ltd, "Cost-Benefit Analysis for Additional Residential Heat and Smoke Alarms in Scotland". March 2010.

<sup>8</sup> See Table 4d at [http://www.firescotland.gov.uk/media/1009447/2015\\_16\\_fire\\_and\\_rescue\\_statistics\\_corrected\\_tables.xlsx](http://www.firescotland.gov.uk/media/1009447/2015_16_fire_and_rescue_statistics_corrected_tables.xlsx).

<sup>9</sup> <http://webarchive.nationalarchives.gov.uk/20121103072344/http://www.communities.gov.uk/fire/researchandstatistics/firestatistics/economiccost/>

## Costs

If the same standard for fire alarms that applies to the private rented sector is extended to other tenures, alarms will need to be installed in properties which do not have any alarm as well as in those which have one or more alarms but which fall short of the required standard in terms of the number and placement of alarms.

Although fire alarms are not mandatory in the owner occupied sector, unless the property was built under the 1993 or subsequent building regulations, only an estimated 7% (110,000) of properties in this tenure do not have any smoke alarm at all.<sup>10</sup> One third (490,000) have one alarm, while the remaining 60% (900,000) have more than one alarm. The number of alarms prescribed by the proposed minimum standard implies that the 600,000 owner-occupied properties with no or only one alarm definitely fall below the proposed standard. Furthermore, it is possible that some or most of the remaining 900,000 properties with more than one alarm would also not comply with the proposed standard, although it is not possible to determine the proportion from the available data.

In the social rented sector, although at least one alarm is required by the Scottish Housing Quality Standard, the estimated 48% (280,000) of properties with only one alarm would definitely fall below the proposed standard. Again, it is likely that some or most of the remaining 52% (305,000) of properties with more than one alarm would fall the standard, although it is not possible to determine this proportion.

In addition, most of the estimated 850,000 owner-occupied properties and 140,000 social rented properties where the alarms are only or partly powered by batteries are likely to require replacement to comply with the standard, unless the battery type is in compliance with the standard (a sealed battery unit designed to last the lifetime of the fire alarm, which is at least 10 years).

Market figures indicate that a mid-range mains-powered, inter-linked smoke alarm costs around £65 and that a mid-range, inter-linked sealed battery alarm with a 10-year battery life costs around £80. Installation of a mains-powered alarm is likely to cost around £50, while sealed battery alarms do not require professional installation.

As the proposal is currently for no alarm to be more than ten years old, each property would incur the upfront purchase (and installation costs where applicable) at least once every ten years. Currently existing alarms will have a manufacturer's recommended lifespan and this is usually ten years, but there is no process for identifying or requiring replacement when the recommended lifespan is exceeded.

The total cost to meet the requirements will depend on the final form of the regulations and the built form of individual properties.

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<sup>10</sup> Scottish Government estimates based on analysis of 2015 Scottish House Condition Survey data.

## 5. SCOTTISH FIRMS IMPACT TEST

Members of the working group helped shape the consultation. Following initial discussions, stakeholders were presented with a draft outline of proposals which were fully considered in the group. The input from individuals representing organisations from across the housing sector was useful as proposals and recommendations were developed and duly finalised.

The highest standards for fire and smoke alarms in houses are set out in building regulations which apply to new build housing and the repairing standard which applies to houses in the private rented sector. Proposals and options outlined in the consultation are to bring other standards in to line with these.

The working group will continue to meet throughout and after the consultation has ended. Members will have the opportunity to consider findings and influence how these can best be taken forward to help reduce fire risk in Scotland's houses. Continued engagement with working group members and other stakeholders will be vitally important as proposals are finalised.

We will specifically engage with stakeholders to seek views on the timescales for (i) introducing any new elements to existing standards and (ii) setting realistic compliance periods to encourage full compliance. The Scottish Government will be hosting events to provide an opportunity for face to face discussions on the consultation document in general and more specifically about the questions posed therein.

### Competition assessment

Social landlords and owner occupiers may be required to take steps to ensure compliance with any additional fire and smoke alarm requirements added to existing housing standards. To comply, they will be required to ensure any installation work carried out on properties is carried out to a high standard by reputable contactors. There is the potential for small and medium sized local businesses to benefit from related works. Where social landlords rent out a significant number of properties, medium or larger enterprises may be employed. Contracts may go out to tender giving a range of businesses the opportunity to bid for the work.

The nature of the work is unlikely to impact on competitiveness of Scottish companies within the UK or elsewhere in Europe. The following competition assessment questions have been considered and it is felt unlikely that any new measures will have a significant impact on competition.

- Will the measure directly or indirectly limit the number or range of suppliers?
- Will the measure limit the ability of supplier to compete?
- Will the measure limit suppliers' incentive to compete vigorously?
- Will the measure limit the choices and information available to consumers?

Our view is that the answer is no to each of these tests.

There is the potential for job creation opportunities to undertake related works.

## Test run of business forms

New business forms may be required to ensure safe installation of fire and smoke alarms. If this proves to be the case, appropriate professional bodies will be involved in drawing up such forms.

## **6. LEGAL AID IMPACT TEST**

Social landlords will seek the co-operation of tenants before any new fire and smoke detectors are installed. It is considered unlikely that there will be a significant increase in tenants raising complaints and therefore it is unlikely there will be any significant impact on the legal aid fund. If social tenants have reason to be unhappy with their landlord, the normal route of complaint is through the Scottish Public Services ombudsman.

Owner occupiers will be responsible for arranging for any new fire and smoke detectors to be installed in their own properties. If an owner is unhappy with the product or the installation work, the first route of complaint would be with the supplier or installer. Again it is considered unlikely that there will be any significant impact on the legal aid fund.

## **7. ENFORCEMENT, SANCTIONS AND MONITORING**

The Scottish Social Housing Charter seeks assurance from social landlords that their homes comply with the Scottish Housing Quality Standard (SHQS). The Scottish Housing Regulator has a statutory role to monitor landlords' performance against this target. The Regulator sets out in its regulatory framework how it will make decisions about engaging with landlords.

The Scottish Government's view is that the Regulator provides sufficient oversight for any change to the standard required in respect of fire and smoke alarms in social housing.

Owner occupied housing – options for enforcement in private housing are outlined in the consultation document. They include existing local authority powers to take action if houses fall below the tolerable standard and owners being required to provide assurance at point of sale.

Tenements or blocks of flats – an option to introduce a duty on owners of tenements to provide evidence of compliance with a standard for fire and smoke alarms is included in the consultation document.

Other options are outlined in the consultation document. Responses to questions posed will help inform appropriate enforcement in each case, and will be reflected in the final BRIA.

## **8. IMPLEMENTATION AND DELIVERY PLAN**

### Post-implementation review

Procedures for post implementation review will be determined by the outcome of the consultation. Stakeholders' views will be considered as these procedures are developed.

Further consultation considering harmonising different elements of housing standards across tenures is to be launched later in 2018.

## **9. SUMMARY AND RECOMMENDATIONS**

The proposals and options outlined in the Consultation on Fire and Smoke alarms in Scottish homes were developed in response to the tragic fire in Grenfell Tower on 14 June 2017. The Ministerial Working Group, which first met on 20 June to oversee a review of building and fire safety regulations, prioritised this consultation to consider setting more stringent fire and smoke alarm requirements, where required, in Scottish homes.

In Scotland, the highest current standards for smoke and fire alarms are in new build housing and in the private rented sector. It is proposed that any new requirements should be based on these standards. These are that there should be at least one functioning smoke alarm in the living room, one in every hallway and landing, a heat alarm in the kitchen, and all alarms should be hard wired and interlinked.

Recommendations for consideration include:

- A. Applying a higher standard to social rented housing
- B. Applying a new standard to flats, irrespective of tenure
- C. Applying a new standard to flats only in high-rise buildings, irrespective of tenure
- D. Applying a new standard to all housing, irrespective of tenure

As detailed above, it is proposed that each of these options are in line with the standard currently applicable to the private rented sector.

Views on each option are invited as part of the consultation process.

### Summary of costs and benefits

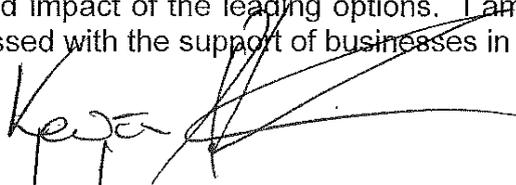
The cost of purchasing and installing fire alarms will be relatively modest, particularly in relation to the costs of loss of life and damage to property which can result from a serious fire. The final costs for individual dwellings will depend on the final form of the requirements and the built form of individual properties, which can vary significantly.

Benefits will be in the form of a reduction in the fatality rate of dwelling fires in Scotland, a potential reduction in the costs of treating those with non-fatal injuries, a potential reduction in the costs of the Scottish Fire and Rescue Service and a reduction in the damaged caused to properties in fires.

## 10. DECLARATION AND PUBLICATION

I have read the Business and Regulatory Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options. I am satisfied that business impact has been assessed with the support of businesses in Scotland.

Signed:



Date:

5/9/2017

**KEVIN STEWART MSP  
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