



Llywodraeth Cymru
Welsh Government

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Welsh Government

Summary of Responses and the Government Response for the consultation on Carbon Monoxide Alarms

April 2024

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Rydym yn croesawu gohebiaeth a galwadau ffôn yn Gymraeg / We welcome
correspondence and telephone calls in Welsh

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1. Introduction

- 1.1 This report provides a summary of the responses to the consultation on the installation of Carbon Monoxide alarms in all residential dwellings.
- 1.2 The Welsh Government proposed to amend the current guidance to include the installation of a CO alarm for the installation of all flued **fixed combustion appliances of any fuel type** in all residential dwellings, including private dwellings. The policy will mean that all the following fuel types would be covered: oil, gas (including LPG) and solid fuel in all residential dwellings.
- 1.3 The views reported in this government response provide a summary of relevant comments received. Not all comments received are included for reasons of relevance to the questions posed or similar. Comments in summaries are those expressed by the respondents to the consultation and do not necessarily reflect those of the Welsh Government.
- 1.4 Building Regulations control certain types of building work, principally the erection and extension of buildings and provision or extension of certain services or fittings, to ensure that buildings meet certain standards of health, safety, welfare, convenience and sustainability.
- 1.5 Compliance with the Building Regulations is the responsibility of the person carrying out the work and the building control system helps to ensure that the required level of performance has been met. The role of a building control body, either the local authority or a private sector Approved Inspector, is to act as an independent third-party check to help achieve compliance. As an alternative to third-party checking by building control, some types of work may be self-certified as being compliant by installers who are registered as a member of a competent person self-certification scheme and have been assessed as competent to do so.
- 1.6 Building Regulations influence how our buildings are constructed and used. As such, they help to deliver significant benefits to society. Regulation can also impose costs on both businesses and individuals. The “functional” nature of the Building Regulations, by having regulation setting out the broad requirements rather than prescribing how it must be achieved, seeks to allow flexibility and ensure innovation is not hindered. Guidance in the Approved Documents that accompany the Regulations then sets out some of the ways that these requirements can be met although it does not have to be followed if the required level of performance can be shown to be achieved in a different way. This approach provides clarity for building control bodies and industry alike.

2. Consultation Responses - Overview

2.1 Overall, there were **forty-one** responses to the consultation. Respondents who completed the consultation response form were asked to assign their organisation to one of twelve types identified on the form (including a self-designated 'other' option). Table 1 below shows the number of responses received from each sector. Of the ten questions asked the respondents' reply is summarised in Table 2.

Table 1

Type of Organisation: Choose one of the following:	Number of Respondents	%
Builder / Developer		
Designer / Engineer /Surveyor	3	7.3
Local Authority	6	14.6
Building Control Approved Inspector		
AI Building Inspector	3	7.3
LA Building inspector		
Architect		
Manufacturer/supply chain		
Property Manager / Landlord	6	14.6
Construction professional		
Professional body		
Building Occupier/ Resident	2	5
Other interested party	21	51

Table 2

Question	Yes%	No%	Unsure %	No response
1. Do you support the Welsh Government's proposal to amend the statutory guidance (Building regulations guidance: Part J (Heat producing appliances) GOV.WALES) supporting Part J of the Building Regulations, to require carbon monoxide alarms to be fitted alongside the installation of a flued fixed combustion appliance of any fuel type? If no, please provide your reasoning and evidence.	85	10	5	0
2. Do you agree that ' connected spaces ' should be excluded as part of the above proposal? If no, please provide your reasoning and evidence.	36	37	14	13
3. Do you agree that where a flue passes through spaces such as a bedroom , they should be excluded as part of the	37	51	4.7	7.3

above proposal? If no, please provide your reasoning and evidence.				
4. Do you agree that flued cookers should be included as part of the above proposal? If no, please provide your reasoning and evidence.	74	10	8	8
5. Do you think that the guidance in Approved Document J (outlined above) on what type of carbon monoxide alarm should be installed requires updating? If no, please provide your reasoning and evidence.	61	12	15	12
6. Do you think that the guidance in Approved Document J on where carbon monoxide alarms should be situated requires updating? If no, please provide your reasoning and evidence.	63	15	15	7
7. Do you agree with the cost estimates and the overall Impact Assessment ? If no, please explain what you consider an appropriate cost range and provide evidence to show why.	34	12	36	17
8. Please use this question to provide any other commentary or observations you have on the proposal.	-	-	-	-
9. We would like to know your views on the effects that the proposals would have on the Welsh language , specifically on opportunities for people to use Welsh and on treating the Welsh language no less favourably than English. What effects do you think there would be? How could positive effects be increased, or negative effects be mitigated?	-	-	-	-
10. Please also explain how you believe the proposals could be formulated or changed so as to have positive effects or increased positive effects on opportunities for people to use the Welsh language and on treating the Welsh language no less favourably than the English language, and no adverse effects on opportunities for people to use the Welsh language and on treating the Welsh language no less favourably than the English language.	-	-	-	-

2.2 Handling of responses

A standard response form was provided for ease of use, however, where respondents did not use the form, representations have been attributed to the most appropriate question. In addition, certain questions were designed to have three answers: yes, no, unsure. Where respondents have not answered with the standard responses proposed but have clearly indicated a clear position in their answer, they have been assigned that response in the statistical analysis. For example, where a respondent used the phrase 'I support the proposal' their response was marked as yes. Where a clear response was not identifiable, answers were marked as 'did not respond' in the statistical analysis with the responses included in the summary of comments. Not all comments are included in this document depending upon their relevance or where several respondents have indicated similar comments a general comment is indicated.

3. Consultation responses – Brief Summary and Government response

Question 1. – Proposal for flued fixed combustion appliance of any fuel type

Do you support the Welsh Government’s proposal to amend the statutory guidance ([Building regulations guidance: Part J \(Heat producing appliances\) | GOV.WALES](#)) supporting Part J of the Building Regulations, to require carbon monoxide alarms to be fitted alongside the installation of a flued fixed combustion appliance of any fuel type?

If no, please provide your reasoning and evidence.

Summary

- 3.1 The large majority of respondents (85%), agreed to support the Welsh Government’s proposal to amend the statutory guidance to require carbon monoxide alarms be fitted alongside the installation of a flued fixed combustion appliance of **any** fuel type.
- 3.2 It was extensively recognised that the proposed amendments will improve the health and safety of people in residential dwellings.
- 3.3 Comments for consideration included the request to be consistent with similar legislation covering carbon monoxide detectors, including the *Smoke and Carbon Monoxide Alarm Regulations* and the *Welsh Development Quality Requirements 2021: Creating beautiful homes and places standards*, to aid simplification in application and avoid legislative conflict. This request was extended to consider cross-border requirements to avoid confusion for bodies working in both Wales and England.
- 3.4 Some respondents indicated concerns around enforcement, particularly in privately owned properties, and vulnerable people ending up being prosecuted. One respondent felt it should be advisory only and the benefits properly advertised.

Government response (question 1)

- 3.5 The responses to the consultation showed a very large majority supporting Welsh Government’s proposal to amend the statutory guidance to require carbon monoxide alarms be fitted alongside the installation of a flued fixed combustion appliance of **any** fuel type.
- 3.6 Whilst the number of recorded deaths is relatively low the deaths are preventable at relatively low cost and Welsh Government believes justified reason to introduce statutory requirements. The consultation proposals extensively recognised that the proposed amendments would improve the health and safety of people in residential dwellings.

- 3.7 Whilst it was commented that the proposals should align with England, which was considered a benefit to industry, the feedback from the consultation in Wales led to further consideration of benefits of additional areas requiring carbon monoxide detection and alarms, as indicated later within this government response.
- 3.8 In relation to enforcement within privately owned properties, the proposed requirements are not retrospective and apply when applicable building work (e.g., replacement gas boiler) is being undertaken. Building control bodies are responsible for interpreting the guidance and enforcing the requirements of the Building Regulations, however in practice, most combustion appliance installations are carried out by those registered with an approved competent persons scheme who self-certify that the installation is compliant with the requirements of the building regulations. The competent person scheme (CPS) has been subject to an ongoing extensive review and forms the primary vehicle for raising quality and providing consistency of delivery to customers. Installers need to demonstrate that they meet relevant minimum technical competence requirements. Welsh Government are responsible for authorising competent person schemes in alignment with the UK government to make sure that the standards are consistent and set the rules that scheme operators must follow and conditions they should meet.

Question 2. – excluding ‘connected spaces’

Integrated Spaces

Do you agree that ‘connected spaces’ should be excluded as part of the above proposal? If no, please provide your reasoning and evidence.

Summary

- 3.9 The number of respondents that agreed and disagreed with the proposed requirement to exclude connected spaces was approximately equal, whilst 14% of the respondents were unsure.
- 3.10 The following is a general cross section of key comments received from respondents.
- 3.11 Regarding connected spaces, respondents commented that not all connected areas are ‘well ventilated’. Whilst some areas are not frequently occupied spaces, respondents commented that CO can vent into these areas.
- 3.12 It was suggested that new build dwellings and recently re-roofed existing dwellings may also have breather membranes rather than traditional bitumen-based sarking felt resulting in loft spaces not being “naturally” ventilated to the same degree that traditional cold pitched roofs once were.
- 3.13 Comments highlighted that connected spaces (for example garages) are sometimes repurposed into spaces such as playrooms, bedroom, gym etc that

a carbon monoxide alarm may need to be installed as part of the change of use with greater exposure to CO.

- 3.14 Several respondents made reference to the use of EN-50292 for determining the location and suitability of alarms in connected spaces, including due to extreme temperatures and dust levels.
- 3.15 Respondents highlighted that CO, being invisible and lighter than air, can potentially propagate throughout a premises progressively poisoning occupants, including examples where an occupant of a flat was alerted by their CO alarm to carbon monoxide coming from a neighbour flat and another cited that a family member had died from CO poisoning whilst in a bathroom that was attached to the kitchen where the boiler was located
- 3.16 A national approved inspector body supported measures which improve and protect the health and safety of occupants. They are not aware of any evidence which would support excluding connected spaces from the proposal.

Question 3. – excluding where a flue passes through spaces such as a bedroom

Bedroom spaces

Do you agree that where a flue passes through spaces such as a bedroom, they should be excluded as part of the above proposal? If no, please provide your reasoning evidence.

Summary

- 3.17 The largest proportion of respondents (51%) disagreed with the proposal that where a flue passes through spaces such as a bedroom, they should be excluded. 37% of respondents agreed with the proposal.
- 3.18 Of those that disagreed the following is an overview of their comments:
- 3.19 Respondents commented that flues can leak and if subject to poor installation/maintenance or interim damage/degradation bedrooms ought to be protected with audible alarms.
- 3.20 One respondent suggested that the strategic placement of detectors is more important than trying to cover every connected space.
- 3.21 Several respondents consider that a CO alarm should be installed in rooms where occupants spend a considerable amount of time and every bedroom due to the potential for increased risks to occupants.
- 3.22 Reference was made to BS EN 50292 in relation to the standard requirement for CO alarms to be installed in every sleeping area. Reference also being

made to Scotland where a similar approach is set out in the Scottish tolerable standard.

- 3.23 One respondent made reference to the important element of training of installers, where a legal duty is placed on registered engineers to examine and confirm the effectiveness of the flue whenever they undertake work on flued appliance(s) and highlighted the practical difficulties of access to concealed flues in for example ceiling voids.
- 3.24 Furthermore, a respondent referenced the Gas Safe Register where it is recommended to install CO alarms throughout the length of the flue route also quoting Section 5.2.2.1 of BS EN 50292:2013 which states “Where a fuel-burning appliance has an extended and/or concealed flue, an apparatus should be installed in each room through which the flue passes”. Carbon monoxide alarms to BS EN 50291-1:2018 in all spaces that flues pass through should be installed.
- 3.25 If the provision is to be a statutory requirement it is suggested by one respondent that a mains connected detector should be specified, possibly even dual sensor Heat and Carbon Monoxide (CO) Alarm.

Question 4.

Flued Cookers

Do you agree that flued cookers should be included as part of the above proposal? If no, please provide your reasoning and evidence.

Summary

- 3.26 There was a large majority of support (74%) for flued cookers to be included as a statutory requirement.
- 3.27 Respondents cited the benefits of providing greater safety for relatively low cost and the high carbon monoxide emissions from cookers as examples of the reasons for support of including the detectors for flued cookers even though extract is provided via flues, as poor installation or failures could lead to dangerous levels of carbon monoxide.
- 3.28 One respondent claimed research from UKHSA had found that gas cookers were almost three times as likely to be a source of carbon monoxide than boilers; and National Energy Action reporting that gas cookers are less likely to be serviced than boilers, indicating that gas cookers may pose an equal or higher risk of carbon monoxide exposure, when compared with boilers.
- 3.29 A comment from one respondent referenced deaths occurring from cookers where people cannot afford to heat their homes, and resort to using the gas hob or oven to keep a room warm instead of putting on more expensive heating. Further details may be found on media link:

<https://www.mirror.co.uk/news/uk-news/beko-gas-cookers-linked-18-23010957>.

- 3.30 Several comments suggested that all appliances with potential to be a source of CO should be considered as part of any updated regulations.
- 3.31 The proposals were in relation to flued cookers, as these are considered 'building work' within the building regulations. However, those who indicated that they disagreed, made the following comments in relation to flueless cookers:
- 3.32 The respondent referred to flueless cookers being the main producer of carbon monoxide and therefore any carbon monoxide created by their use is emitted directly into the room they are located in. Increase in the risk of CO production therefore ought to be included in future requirements for the installation of CO alarms. The proposals relate to flued fixed combustion appliances of any fuel type.

Government response (questions 2 to 4, Integrated Spaces, Bedrooms, and Cookers)

- 3.33 In relation to question 2 (connected spaces), the replies were split with just over half of respondents disagreeing with our proposal. For question 3 (flue passes through spaces such as a bedroom) the majority of those that responded disagreed with our proposals.
- 3.34 Given that the majority of respondents disagreed with Questions 2 and 3, we have considered the responses and undertaken further consideration of the impact and benefits of including CO alarms within 'connected spaces' and 'bedroom spaces'. Following this, we are proposing a change to the proposals set out in the consultation. We propose to amend the guidance within Approved Document J to require a CO alarm within any space connected to the dwelling such as a garage space which is attached to the dwelling (i.e., not detached garages). In addition, a CO detector will be required in high-risk rooms (e.g., bedroom/living room) if the flue from an appliance runs through that room.
- 3.35 The intent with the above guidance change for rooms containing flues is to minimise the risk to occupants, especially in high-risk areas where occupants will be sleeping or occupying the space for most of the time. Although some connected spaces such as a garage space are still considered as well-ventilated spaces where occupants are less likely to occupy for long periods, and hence may be a lower risk, these are areas that are also typically converted (also possibly without building regulation approval i.e. unauthorised) to a living space and are more likely to have interconnecting doors which may create pathways for CO to enter the main dwelling spaces. In addition, new dwellings and deep retrofits of existing dwellings may result in low air permeability dwellings that may result in less dilution of the carbon monoxide.

- 3.36 We also consider that requiring a CO alarm within all connected spaces where an appliance is installed (where the space is connected with the dwelling) also has the benefit of providing practical clarity for installers in relation to the requirements for when a CO alarm should be installed.
- 3.37 The Welsh Government consider the actual requirement for carbon monoxide alarms is likely to be low for new dwellings in the future with the transition from gas boilers towards low carbon technology alternatives for heating and hot water (e.g., heat pumps), and design solutions for new dwellings are more likely to install a flue directly out through an external wall. Therefore, we consider that the maximum effect of the above proposals would be when applicable building work (e.g., installation or replacement of a new combustion appliance) is undertaken on existing dwellings. The impact of this will be reflected in the final impact assessment.
- 3.38 In relation to question 4 (flued cookers), the vast majority agreed with our proposal. Therefore, we will proceed with the proposal to require a CO alarm when a flued cooker is installed. We do not intend to include flueless gas cookers as building regulations do not cover flueless cookers in general, the installation of a flued cooker is building work within the scope of regulations. In smaller homes, it is possible that a gas cooker would be situated in the same room as the boiler. Our proposals will create an alarm requirement in the room where the boiler is situated, and to some extent could mitigate the risk from gas cookers.
- 3.39 The Welsh Government has chosen not to mandate for full compliance with EN 50292:2023 as a minimum requirement at this time. However, some of our amended proposals align with parts of this standard and provides useful guidance if developers/installers which to go further than the minimum requirements of the building regulations.
- 3.40 The guidance will require that the audibility levels in adjoining connected spaces are taken into account and the effect of carbon monoxide moving throughout the building. Carbon monoxide detectors should include an integral sounder.
- 3.41 The Welsh Government will require a carbon monoxide detection system to alert occupants to the presence of carbon monoxide which will consist of at least:
- One carbon monoxide detector in every space (including garages and loft spaces) containing a fixed combustion appliance (including a flued combustion appliance used for cooking), and
 - One carbon monoxide detector to provide early warning to high-risk accommodation, that is, a bedroom or principal habitable room (e.g., living room), where a flue passes through these rooms.

4. Other Considerations

Question 5.

Type of Alarm

Do you think that the guidance in Approved Document J (outlined above) on *what type* of carbon monoxide alarm should be installed requires updating? If no, please provide your reasoning and evidence.

Summary

- 4.1 61% of respondents agreed that the type of CO alarm requires updating within the guidance in Approved Document J whilst 12% disagreed.
- 4.2 The following key comments were received from respondents:
- 4.3 Comments received suggested the full range of preferences for battery-operated only, mains-operated only, or both battery and mains-operated alarms.
- 4.4 Some respondents commented that current guidance provides adequate information on the type of alarm, (i.e., battery operated and mains-operated).
- 4.5 Several respondents commented that sealed battery alarms are just as effective as mains-operated, however with similar life span, sealed batteries are suggested as being more cost effective.
- 4.6 One industry organisation recommended changing British Standard BS EN 50291 to the European standard (CEN) EN 50291-1.
- 4.7 One respondent wished to highlight the availability of cheap CO alarms, and the unreliability and obvious risks. Reference was made to BBC programme “Fake Britain” which highlighted the issue.
<https://www.katiehainestrust.com/gordon-samuel-on-bbc-fake-britain/>.
- 4.8 An approved inspector body commented that guidance for the type of alarm to be installed would benefit from greater clarity. It was also suggested that consistency should be provided in relation to other guidance namely the Welsh Development Quality Requirements 2021: Creating beautiful homes and places standards, which requires the provision of hard-wired carbon monoxide detectors with a battery back-up. The same body noted the complexity of alarm notifications recommended by the standard and the potential for the end user to be confused by the different warning types indicating CO presence, low battery, fault or end of life.
- 4.9 Many respondents commented that battery alarms work well and are an affordable option for many people and any changes should remain proportionate.

- 4.10 A respondent considered that the minimum should include the standards for any carbon monoxide alarm to meet the requirements. This may assist in slightly reducing the cost of insurance if a minimum quality standard is applied and is clear and advertised. We agree in laying down the quality standards to be met but not the type, make or model.
- 4.11 A local authority body did not believe that the guidance in Approved Document J, requires updating as it is already broadly aligned to that detailed in BS EN 50291-1:2018. Nonetheless, the respondent commented that the now withdrawn BS EN 50291-1:2002 is cited in Approved Document J, so may benefit from being updated to reflect the current version and that where possible, requirements and guidance, should align to avoid confusion. A suggestion was made that hard wired detectors exclusively installed could be problematic for appliances that are being retrofitted/replaced, where there is not an existing and suitable electrical supply. It was recommended that alarms should be physically fixed to the building (i.e., mechanically fixed) to minimise the risk of occupants removing the alarms. Furthermore, a requirement that alarms should be of the 'end-of-life' fault warning type that emits a signal/visual display to warn the user to replace the device.

Question 6.

Location of Alarm

Do you think that the guidance in Approved Document J on where carbon monoxide alarms should be situated requires updating? If no, please provide your reasoning and evidence.

Summary

- 4.12 63% of respondents agreed that the location of alarms requires updating within guidance in Approved Document J, whilst 15% disagreed.
- 4.13 The following key comments were received from respondents:
- 4.14 Some respondents commented that the current guidance on location is acceptable whilst a significant number of respondents suggested updating was required.
- 4.15 One comment suggested that if attic spaces and concealed connecting flue pathways are included, the guidance will need to be updated to reflect this.
- 4.16 One responded highlighted differences between EN 50292 and the current guidance and recommended this should be specifically reviewed.
- 4.17 CO alarms have been placed incorrectly at low level in homes, as commented by one respondent and clear guidance is therefore needed in the approved document.

- 4.18 One respondent notes that the guidance within Approved Document J aligns with that given in BS EN 50292; however, there is additional criteria within the standard that the Welsh Government may consider for inclusion in any future update. In particular, guidance on unsuitable positions, and sloping ceilings, and consideration given to inclusion of diagrams.

Government response (question 5 and 6, Type and Location of alarms)

- 4.19 The Welsh Government agree with the respondents' overriding view that the type of alarms (question 5) should remain as a choice for the developer as the battery-operated type of alarms work adequately and are cost effective. The argument for mains power is not believed to be strong enough to require mains version to be required with the approved document.
- 4.20 Whilst the *Welsh Development Quality Requirements 2021: Creating beautiful homes and places standards* requires that "Homes should be fitted with hard wired carbon monoxide detectors with battery back-up", Welsh Government will only mandate for the battery version of devices and permit developers and homeowners to choose whether they wish to instal mains powered devices.
- 4.21 The location of CO alarms (question 6) has been carefully considered by the Welsh Government following responses received. The Welsh Government will review the proposed guidance to provide greater clarity of the requirements regarding siting of detectors and additional guidance within the approved document will be provided. All standards referred to within the guidance will be checked for inclusion of the latest version and their relevance to the subject matter. The merits of including additional diagrams will be considered and provided where deemed necessary.
- 4.22 However, the current proposals are likely to follow the requirements indicated below. Unless otherwise indicated by the manufacturer, carbon monoxide detectors will be required to be either:
- ceiling mounted and positioned at least 300 mm from any wall, or
 - wall mounted and positioned at least 150 mm below the ceiling and higher than any door or window in the room.
- 4.23 Carbon monoxide detectors in the space containing the combustion appliance should be sited between 1 m and 3 m from the appliance.
- 4.24 Note: where the combustion appliance is located in a small space it may not be possible to locate the detector within that space. In such circumstances the detector may be located at the appropriate distance outside of the space.
- 4.25 A carbon monoxide detector should not be sited:
- in an enclosed space (for example in a cupboard or behind a curtain)
 - where it can be obstructed (for example by furniture)

- directly above a sink
- next to a door or window
- next to an extract fan
- next to an air vent or similar ventilation opening.
- in an area where the temperature may drop below -10°C or exceed 40°C, unless it is designed to do so.
- where dirt and dust may block the sensor
- in a damp or humid location, or
- in the immediate vicinity of a cooking appliance.

4.26 Additional guidance on the siting of carbon monoxide detectors, including enhanced coverage, may be obtained in BS EN 50292.

4.27 The provision of a carbon monoxide detection system should not be regarded as a substitute for the correct installation and regular servicing of a combustion appliance.

5. Cost estimates

Question 7.

Cost Estimates and Impact Assessment (IA)

Do you agree with the cost estimates and the overall Impact Assessment? If no, please explain what you consider an appropriate cost range and provide evidence to show why.

Summary

- 5.1 34% of respondents considered that the cost estimates and the overall Impact Assessment were appropriate whilst 12% disagreed.
- 5.2 The following key comments were received from respondents:
- 5.3 Respondents believed that battery-operated alarms in particular are low-cost and justifies additional provisions for life safety.
- 5.4 Several respondents commented that it would be useful to see the figures for deaths and injuries caused by CO in Wales and the cost of installing CO alarms in every house.
- 5.5 One respondent suggested that mains operated devices should be mandated despite the increased cost of the mains-operated versions due to greater reliability and concerns over battery failures.
- 5.6 Some comments indicated that they believed there was inadequate information to permit a detailed assessment upon the cost estimates, including the methodology followed to calculate the estimates. However, in terms of health cost burden, a respondent suggested it is likely there are underestimations since the health burden of CO is difficult to calculate due to data limitations.
- 5.7 One respondent suggested that the overall cost of the proposed measures for battery operated alarms will be in the order of £70M based upon one detector per property being required. Where additional detectors might be required, they suggested (e.g., in the older properties with flues through bedrooms) the costs will increase to around £100M. There were no supporting calculations presented to support these estimates.
- 5.8 One comment suggested the cost estimates did not make it clear on the type of alarm (i.e., battery or mains-wired). It was also claimed that Scotland saw a shortage of carbon monoxide alarms when similar guidance was introduced, and this could be considered within the estimates in terms of price increases.

- 5.9 One respondent highlighted the impact upon those negatively impacted by socio-economic factors and this should be considered as part of the assessment.
- 5.10 One respondent suggested that the health benefits with the inclusion of gas cookers would be a minimal increase in cost and suggested that they would expect including gas cookers within the regulations would provide a greater health benefit than currently estimated.

Government response (question 7)

- 5.11 The Impact assessment presents a necessarily broad assessment of impacts, based on assumed development costs. Using this basis, the impact assessment is an indicative representation of the likely effect of the proposed changes.
- 5.12 We are grateful for the comments and feedback, however, it should be noted that the proposals are not retrospective, and the requirements would only apply when relevant building work (e.g., replacement gas boiler) is being undertaken in relation to a dwelling.
- 5.13 The Welsh Government believe that the proposals are proportionate, and the emphasis is upon saving lives. The cost estimates and impact of the proposals consulted upon are believed to be appropriate. The cost of an increase in the requirement for additional alarms within connected spaces and bedrooms with flues running through them will be further evaluated prior to introducing the changes.
- 5.14 Information on the precise number of deaths caused from CO in Wales is not presently available and the figures indicated within the consultation document are UK-wide.
- 5.15 Whilst the statistics show, deaths from CO poisoning are relatively low, they are avoidable deaths. In addition, it is the view of some medical experts that carbon monoxide poisonings are wrongly diagnosed and under-reported, meaning deaths and injuries could be much higher. There is clear evidence that battery operated alarms offer a cost-effective solution for much of the population of Wales and will not unduly burden developers with additional high costs.
- 5.16 The final impact assessment will consider the comments received from the consultation, policy changes indicated in this response and will be published alongside the amended guidance.

Associated changes

Question 8.

Please use this question to provide any other commentary or observations you have on the proposal.

Summary

- 5.17 This question gave respondents the opportunity to raise any other issues for consideration. The following key comments were received from respondents on a range of different topics. Subject areas previously considered in this response have not been considered further in this section.
- 5.18 One comment suggested people should be educated better on the dangers/signs of Carbon Monoxide poisoning, and Welsh Government should fund any of the changes.
- 5.19 It was suggested any possible CO producing appliance should have an alarm fitted to bring into line RHWA (Renting Homes Wales Act).
- 5.20 A respondent indicated that for new build and rental accommodation, the introduction of a requirement to provide mains wired Fire and CO₂ detection is a practical proposition. They indicated that this is not the case with existing private residential property and recommended a campaign to encourage the voluntary installation of mains wired detection of Fire and CO₂ detection. With a requirement to install detection on the sale of a private residential property for a ten-year period before making it compulsory for all residential property in say 2033.
- 5.21 It was suggested by one respondent that CO alarms in private dwellings should be advisory only.
- 5.22 One respondent requested that every effort is made to consolidate any changed provisions/guidance within an amended AD, rather than an amendment booklet that needs to be read alongside the main document.
- 5.23 One responded outlined a number of examples where vulnerable people are at greater risk due to exposure to CO. The following media link was provided:
- <https://www.gov.uk/government/publications/carbon-monoxide-properties-incidentmanagement-and-toxicology/carbon-monoxide-general-information>
- 5.24 One respondent commented that the proposals were unlikely to be adopted extensively in existing buildings and generally take too long to have a positive impact. They recommended CO alarms should be mandatory on the change of appliances such as fossil fuel boilers. It was also suggested that

implementing CO alarms into the existing housing stock will become much more relevant.

- 5.25 One respondent commented that if mains-wired CO alarms are introduced alongside the installation of new heating appliances, this would become cost prohibitive for many people.

Government response (question 8)

- 5.26 As responded elsewhere within this document the Welsh Government will require battery-operated alarms as a low-cost-effective solution. Mains powered alarms will remain an option for the developer or homeowner as appropriate.
- 5.27 Non-fixed Appliances are subject to legislation outside of the scope of the building regulations.
- 5.28 The type and location of alarms is considered within the Welsh Government response to questions 5 and 6.
- 5.29 The Welsh Government has considered the requirements of BSEN50292 and whilst some of the requirements are deemed appropriate for inclusion at this stage, the full requirements are not considered necessary to mandate as a minimum requirement for all dwellings without further evidence.
- 5.30 The new guidance will be published as an updated approved document, instead of a separate booklet option.
- 5.31 The scope of the building regulations extend to new dwellings and existing dwellings where applicable building work are being undertaken. Anyone wanting to carry out Building Work in new or existing buildings which is subject to the Building Regulations is required by law to make sure it complies with the regulations. 'Building Work' is defined in Regulation 3 of the Building Regulations. The regulations and its approved document Part J provide guidance on the areas for which the legislation permits and areas outside of the regulations cannot be included as part of changes to these regulations that have been consulted upon.

Question 9.

Effects on the Welsh language

We would like to know your views on the effects that the proposals would have on the Welsh language, specifically on opportunities for people to use Welsh and on treating the Welsh language no less favourably than English.

What effects do you think there would be? How could positive effects be increased, or negative effects be mitigated?

Summary

- 5.32 The following most relevant comments were received from respondents. Subject areas previously considered in this response or similar comments have not been considered further in this section.
- 5.33 In general, most respondents commented that the proposals will not have any adverse impact on the Welsh language.
- 5.34 One comment received suggested that if Welsh Government used their own Welsh speaking installers, then they could speak Welsh to a variety of people.
- 5.35 Reply to 9 and 10 – instruction and guidance must be available to download in both English and Welsh from manufacturers. Any further requirement may incur an additional cost.
- 5.36 The measures are unlikely to have any significant impact on promoting the use of the Welsh Language other than making sure that all guidance and operating are provided in Welsh in addition to the usual plethora of international languages.
- 5.37 The subject of exempting spaces with higher air flow was considered in questions 2 to 4.
- 5.38 One respondent recommended that information should be available in various formats and languages including an “easy read” document for residents, such as those living in supported accommodation, learning or literacy difficulties.

Question 10.

Positive effects or increased positive effects on opportunities for people to use the Welsh language.

Please also explain how you believe the proposals could be formulated or changed so as to have positive effects or increased positive effects on opportunities for people to use the Welsh language and on treating the Welsh language no less favourably than the English language, and no adverse effects on opportunities for people to use the Welsh language and on treating the Welsh language no less favourably than the English language.

Summary

- 5.39 The following most relevant comments were received from respondents. Subject areas previously considered in this response or similar comments have not been considered further in this section.
- 5.40 In general, most respondents commented that the proposals will not have any adverse impact on the Welsh language.

- 5.41 Respondents suggested the use of Welsh speaking installers and ensure that all guidance is available in the medium of Welsh.
- 5.42 Reply to 9 and 10 – instruction and guidance must be available to download in both English and Welsh from manufacturers. Any further requirement may incur an additional cost.
- 5.43 A respondent suggested that any legislation should be translated into languages spoken by ethnic communities living in Wales.

Government response (questions 9 and 10)

- 5.44 The Welsh language is a strategic priority for the Welsh Government and its vision is to see the language thrive. To help achieve this the Welsh Language Standards are a set of legally binding requirements which apply to the Welsh Government. All Building Regulations documents are considered against the standards and published accordingly.

6. Next steps

- 6.1 The Welsh Government values all the responses received to these consultations.
Approved Document J (Heat producing appliances) will be finalised in line with the Government responses to each section/question. We estimate the amendment regulations and associated guidance will be published early 2024, coming into effect six months after publication.