Implementing the Domestic Fire Safety (Wales) Measure 2011

Consultation – summary of responses

Part 2 of 3

075-17935 - East Sussex Fire & Rescue Service (Jo Fowler)
077-17935 - Viking SupplyNet Ltd (Chris Gill)
078-17935 - South Wales Fire and Rescue Service (Geraint Parry)
079-17935 - South Wales Fire and Rescue Service (Vaughan Jenkins)
080-17935 - South Wales Fire and Rescue Service (Gareth Langdon)
081-17935 - South Wales Fire and Rescue Service (Mathew Bradford)
082-17935 - South Wales Fire and Rescue Service (Gary Johnson)
083-17935 - South Wales Fire and Rescue Service (David Owen)
084-17935 - South Wales Fire and Rescue Service (Ken Ralph)
085-17935 - South Wales Fire and Rescue Service (Barrie Dickinson)
086-17935 - LABC Cymru (Peter Richards)
087-17935 - South Wales Fire and Rescue Service (David Lozano)
088-17935 - South Wales Fire and Rescue Service (Phil Pinches)
089-17935 - BAFSA (Ian Gough)
090-17935 - South Wales Fire and Rescue Service (David Hughes)
091-17935 - South Wales Fire and Rescue Service (Rob Morris)
092-17935 - South Wales Fire and Rescue Service (Richard Hassett)
093-17935 - South Wales Fire and Rescue Service (Lawrence Morris)
094-17935 - London Fire and Emergency Planning Authority
095-17935 - South Wales Fire and Rescue Service (David Baxter)
096-17935 - Grwp Gwalia
097-17935 - Fire Brigades Union in Wales
100-17935 - Plumis (Alan Hart)
101-17935 - South Wales Fire and Rescue Service (Leigh Jones)
102-17935 - Celtech Consultancy Ltd
104-17935 - Oxfordshire County Council Fire and Rescue Service
105-17935 - South Wales Fire and Rescue Service (David Burton)
106-17935 - Plumis (William Makant)
107-17935 - Cleveland Fire Brigade (Ian Hayton)
108-17935 - Tyne and Wear Fire & Rescue Service (Ian Bell)
111-17935 - Aircrete Products Association Limited
112-17935 - South Wales Fire and Rescue Service (Don Freeman)
113-17935 - Redrow Homes
115-17935 - Modern Masonry Alliance
117-17935 - North Wales Fire and Rescue Service (Paul Jenkinson)
119-17935 - Hampshire Fire and Rescue Service (Stewart Adamson)
120-17935 - South Wales Fire and Rescue Service (Des Morris)
122-17935 - Armstrong Priestley Ltd (Peter Armstrong)
123-17935 - Karen Taylor
124-17935 - Tai Clwyd Housing Association comment
125-17935 - Persimmon Homes West Wales
126-17935 - Charles Church West Wales
127-17935 - Quenchfire

129-17935 - Derbyshire Fire and Rescue Service (Rob Mackie)
130-17935 - Persimmon Homes East Wales
131-17935 - Staffordshire Fire and Rescue Service (Dean Stevens)
132-17935 - Staffordshire Chief Fire Officers Association.
133-17935 - McCarthy and Stone (Marc Primaroh)
134-17935 - ISP Architects Ltd comment
135-17935 - Royal Society of Architects in Wales
136-17935 - Ash Fire Management & Ventilation Systems Ltd
137-17935 - South Wales Fire and Rescue Service (Huw Jakeway)
138-17935 - Watkin Jones Homes
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141-17935 - Devon and Somerset Fire and Rescue Service
142-17935 - Newport City Council Building Control
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146-17935 - Residential Landlords Association
147-17935 - Cambridgeshire Fire and Rescue Service (Steve Cotton)
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149-17935 - Federation of Master Builders
151-17935 – Home Builders Federation
152-17935 - Hertfordshire Fire and Rescue Service (Dave Gould)
153-17935 - Neath Port Talbot CBC
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162-17935 - Bovis Homes Ltd
163-17935 - Llanmoor Homes
164-17935 - The Chartered Institute of Plumbing and Heating Engineering
165-17935 - Barratt Developments PLC
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075-17935 - East Sussex Fire & Rescue Service (Jo Fowler)

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: Jo Fowler

Organisation (if applicable): East Sussex Fire & Rescue Service

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes ☒
No ☐
Comments:

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes ☒
No ☐
Comments: For multiple occupancy dwellings, it should be clarified that the order applies to the common parts as well as the individual dwellings.

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes ☒
No ☐
Comments:

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes ☒
No ☐
Comments:

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes ☒
No ☐
Comments: I believe that regulation of maintenance of sprinkler systems would be very difficult to enforce - who would do it? However, I think that consideration could be given to regulating maintenance in rented accommodation (in much the same way as gas appliance certification is regulated). A requirement to provide a current certificate of maintenance for a sprinkler system could also be added to other existing requirements that apply when a dwelling is being sold.

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes ☒
No ☐
Comments:

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes ☒
No ☐
Comments:

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[1] remain relevant given the proposals covered by the new legislation?

Yes ☒
No ☐
Comments:

[1] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes ☒
No ☐

Comments:

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes ☒
No ☐

Comments: Some omissions from ADB appear to be recommended in the draft proposal that have no direct relevance to the introduction of sprinklers. It is unclear why the Welsh Government would want to omit these paragraphs (e.g. reference to third party accreditation schemes).
Paragraph 2.5 is clearly written to support the development and introduction of new and innovative sprinkler systems in the future. However, if it remains worded as per the draft, this will be open to abuse and may encourage the use of non-code compliant systems. This paragraph also states that the 20m height limit in BS 9251 may be ignored. The Welsh Government has not provided any evidence in the consultation document provided to show why it believes this to be acceptable.
In paragraph 2.20 of the proposed new ADB document, it is unclear whether the sprinklers required when a room is added are required just in the new room(s) or throughout the dwelling. This should be clarified. The reference to paragraph 0.21 does not appear to make sense.

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes ☒
No ☐
Comments:

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes ☒
No ☐

Comments:

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

077-17935 - Viking SupplyNet Ltd (Chris Gill)

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: Chris Gill

Organisation (if applicable): The Viking Corporation

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes X
No ☐
Comments: This approach appears to be the best balance between ensuring adequate enforcement, speed of implementation and avoidance of burdensome and expensive processes for the housebuilding trade.

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes X
No ☐
Comments: The list covers all of the major risk groups from injury and death from fires in the home/residence.

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes ☐
No X
Comments:
Whilst I agree that BS9251 should be referenced, it should not be the ONLY standard allowed. Other standards, which are suitable for use, exist and their use should be allowed if the building inspector agrees. Such standard include

the NFPA 13R and 13D codes as well as the INSTA 900 codes in use in Scandinavia. Limiting use to BS9251 does not allow the full benefits of existing residential sprinkler technology to be used.

In addition, limiting reference to BS9251 may also limit the use of the draft EN standard which is being worked on within CEN.

It appears that this has been taken account in the proposed wording changed to the Approved Document however I would propose amending the wording as follows (my changes undelined):

"The components of the automatic fire suppression systems should be in accordance with an appropriate, fully implemented, technical standard such as BS 9252: 2011 Components for residential sprinkler systems – Specification and test methods for residential sprinklers or an equivalent technical standard judged acceptable by the approved building inspector or local authority".

These parts of the AD goes on to suggest that if BS9251 or BS9252 is not followed then Appendix A should be followed. As Appendix A covers only passive fire protection measures and not sprinkler systems I would suggest deleting the text “Where an alternative technical standard (to BS 9251 or BS 9252) is used the guidance of Appendix A should be followed.” The above suggested text places the onus onto the building inspector or local authority to judge whether the alternative technical standard is acceptable.

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes X
No ☐
Comments:

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes X
No ☐
Comments:

Question 6: Do you agree with the proposal to produce a householder’s guide to encourage the maintenance of fire suppression systems?

Yes X

No ☐
Comments: A programme of education will be necessary to inform householder's about sprinklers and the do's and don'ts.

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes X
No ☐
Comments:

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[2] remain relevant given the proposals covered by the new legislation?

Yes X
No ☐
Comments:

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes X
No ☐
Comments:

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes X
No ☐
Comments:

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

[2] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

Yes ☐
No X
Comments: Given that sprinklers are frequently fitted as a compensatory feature against relaxations in other design requirements such as longer travel distances, it is disappointing that this was not considered during the BRE work. In many cases the inclusion of sprinkler systems can allow preferred building designs to be implemented when otherwise they would not be granted a building permit, for example if fire brigade access is limited. Also, sprinklers allow a more open-plan design in some cases and this could increase the value of the housing on offer due to increased demand. Such aspects aught to have been considered.

The report states that no economies of scale were included for housing developments which will lead to an increased negative perception of the cost benefit. The report mentions that such economies could be up to 30%. This, in addition to savings brought about by shared sprinkler water supplies for housing developments could significantly reduce the cost per housing unit. As much of the new housing stock would be expected to be in such developments then such economies of scale should be included (as have been for dormitories and blocks of flats).

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes X
No
Comments:

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

078-17935 - South Wales Fire and Rescue Service (Geraint Parry)

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Mr Geraint Parry

Organisation (South Wales Fire and Rescue Service):

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes ☒
No ☐
Comments: This method is the most appropriate for implementing the Measure. Without an amendment to Building Regulations which clearly stipulates (by way of a new unambiguous regulation) the requirement to fit automatic water suppression systems in those premises covered by the Measure, it would be possible for applicants to argue that they could demonstrate equivalent levels of safety by other means thus negating the requirement to install sprinklers, thereby circumventing the intent of the Measure.

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes ☒
No ☐
Comments: The list of residences appears appropriate; however more detailed guidance is required regarding the difference between a boarding house and a hotel. Some hotels now house guests on a relatively long term basis, such as families awaiting social housing, providing them with full board. If a premises of this nature , was either newly built or extended and called a hotel by the developers there would be no requirement for sprinklers, if on the other hand in a true reflection of its intended purpose it was called a boarding house sprinklers would be required.

Whilst distinctions such as this may appear pedantic, it is precisely this level of detail which the regulating authorities will have to deal with; more detailed guidance regarding the exact nature of the categories of residence, either in the Measure or as supporting guidance would be essential

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes ☒
No ☐
Comments: For the majority of premises caught by the Measure BS9251 would provide an appropriate standard, whilst for some larger premises BS12845 may be more suitable.

The potential for installers and designers to derogate from the standard should not be excluded; strict adherence to BS9251 would require that only parts conforming to BS9252 would be acceptable. At the moment there are no sprinkler heads available which conform to this standard. The designer should retain the option to use alternative components, as is the case presently, as long as those components are tested to an accepted standard such as UL 1626 where there is a data sheet available which supports their suitability for the application in question. Similarly where a designer chooses to utilise another standard such as NFPA13d for the entire system this should be permissible within the Measure as long as the proposed standard has been robustly tested and found appropriate for the application in which it is to be used.

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes ☒
No ☐
Comments: Whilst some degree of standardisation is necessary over-prescription could have the effect of stifling innovation.
Whatever standard is utilised, the suppression system must be suitable for the application it is being proposed for and must be designed and installed to a recognised standard. In house testing alone should not be acceptable.
Any system installed must be true to the intent of the Measure, providing protection in all those areas of the building caught by the Measure. It should not be sufficient for a designer to propose a system which would protect only the access rooms and escape routes, due cognisance must be given to the fact that 53% of all fire fatalities occur in the room of origin and it is within these rooms that the Measure will have its greatest impact.

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes ☐
No ☒

Comments: For those premises and parts of premises which fall under the Regulatory Reform (Fire Safety) Order 2005 the maintenance of suppression systems can and should be enforced under the Order. Article 17 of the Order states:

17.—(1) Where necessary in order to safeguard the safety of relevant persons the responsible person must ensure that the premises and any facilities, equipment and devices provided in respect of the premises under this Order or, subject to paragraph (6), under any other enactment, including any enactment repealed or revoked by this Order, are subject to a suitable system of maintenance and are maintained in an efficient state, in efficient working order and in good repair.

This is of particular relevance where design freedoms are allowed on the basis of sprinkler provision which would have the effect of reducing the passive structural elements of fire safety such as fire doors, compartmentation and fire resistance.

For those premises and parts of premises which do not fall within the order then, whilst not ideal, the proposal not to regulate is acceptable due to the difficulties which would be experienced in trying to regulate the maintenance of the systems.
If systems are mains fed the maintenance requirements are minimal: the heads and pipework require no maintenance, the only part of the system which requires regular maintenance is the pump which is fitted to tank and pump systems, or the jockey pump if fitted. For this reason mains fed systems should be fitted wherever possible.
The problems of lack of maintenance will reduce over time as market forces come into operation. Currently many householders use service providers to maintain their heating systems and many of these service providers such as gas undertakers have branched out into other areas of house maintenance; it is not unreasonable to assume that these companies will also tender for sprinkler maintenance as it is relatively straightforward.
Additionally some companies are now offering a self starting pump set which turns over weekly or monthly, this would reduce the likelihood of system failure.

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes ☒
No ☐
Comments: This is an essential element of the Measure; householders are largely unaware of the operation and limitations of a sprinkler system. An easily understood guide will reduce the incidence of fire suppression systems being rendered ineffective by over painting of sprinkler heads, placing large items of furniture within close proximity to heads/ nozzles etc.

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes ☐
No ☒
Comments: Whilst it is accepted that the impact for builders, particularly S.M.E.s may be considerable, and that a transitional period of 6 months would in some degree offset the impact, this leaves considerable scope for developers to make Building Regulations applications for large numbers of buildings which could significantly reduce the number of sprinklered buildings in the first three years of the Measure.
The benefits to the building industry from the proposed approach will largely be available to the larger concerns only as they have the financial capacity to acquire land, planning permission and Building Regulations approval, it will be of limited value to S.M.E.s in the industry as they will lack the capacity to forecast and pre-plan to the same degree.
The design implications of the new standard have to a large extent been addressed by existing guidance, system design will be of approved standards which are already available, the design freedoms, or 'trade-offs' are largely those which currently exist within the approved documents and British Standards.
The building industry has had almost two years to address training and supply chain issues, as discussed above the specifications need no development as they are existing.
There is a significant impact for the Fire and Rescue Services in Wales. Each of these Services will be consulted on all Building Regulation applications within their service area for premises which are caught by the Regulatory Reform (Fire Safety) Order 2005. If they are subjected to a large number of large scale developments intended for the following three years this will significantly stretch the available legislative fire safety resources.

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[3] remain relevant given the proposals covered by the new legislation?

Yes ☒
No ☐
Comments:

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes ☒
No ☐
Comments: The issue of fitness for purpose will not be affected by the implementation of the regulations;
The capacity however may not be sufficient. Consideration should be given to an approvals process for any companies seeking to enter the training provision market in order to reduce any possible reduction in training delivery standards.

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes ☒ With reservations
No ☐
Comments: Whilst the majority of the changes are appropriate, paragraph 18.13 in Approved Document B volume 2 – Buildings Other than Dwellinghouses implies that a sprinkler system installed to BS: 9251 would be appropriate for use when designing a mechanical smoke extraction system for a basement, BS12845 allows a designer to choose a nominal fire size of mW based on assumed maximum area of operation, this is not possible under BS9251 and an assumption of a 5mW fire may be incorrect.
Additionally the issue of duration of supply could have serious implications for firefighters, firefighting in basements is arduous and dangerous, and therefore time must be taken before affecting entry to ensure that all health and safety protocols are being observed. A residential system installed under BS: 9251 has a guaranteed supply of 30 minutes and this is likely to be sufficient to control the fire until internal firefighting operations can be commenced. However a domestic system under 9251 has a guaranteed supply of only 10 minutes and the system would have ceased to operate before firefighting operations can be commenced; this substantially increases the risk to firefighters. Mechanical ventilation of basements should be acceptable only where a BS: 12845, or equivalent, system is provided.

[3] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes ☐
No ☒
Comments:
The cost benefit analysis for Wales follows the same methodology as the 3 previous analyses, these analyses use the 'green book' estimated cost which is based on the Department of Transports cost of a death figure. This figure does not take into account the cost of fire service attendance; this seems incongruous when assessing the cost of fire. It is reasonable to assert that the inclusion of these not insubstantial costs would have a positive effect on the cost benefit analyses, possibly bringing further premises into the cost neutral or cost beneficial outcomes of the analysis.
The costs for tanks and mains connections, even taking into account the sensitivity analyses, are overstated. Many new large scale developments will benefit greatly from economies of scale.

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes ☒With reservations
No ☐
Comments: Option 3 (Do nothing) is considered as having no cost, however whilst it is accepted that this option calls for no capital outlay, doing nothing will not deliver the net benefit predicted for the previous two options, therefore the cost of doing nothing could be as high as £48.8m (option 1)

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

The issues regarding water supply are overstated, the current situation for firefighting water is that the water undertakers are signed up to the Water UK National Guidance Document on Water for Firefighting, despite this they are unable to guarantee the supply for firefighting to the flow requirements of this document. Where these requirements cannot be met the developer is supposed to provide a 45000 litre tank supply for firefighting. The developers take great pains to demonstrate that, whilst the water undertakers will not guarantee supply to the flows and quantity required, the day to day

requirements for potable water for general household purposes are such that at any given time the water supply to the development is adequate to meet the flow requirements for firefighting purposes.

Housing developments with units of detached or semidetached houses of not more than two floors should have a water supply capable of delivering a minimum of eight litres per second through any single hydrant. This equates to 480l/min, more than adequate for a BS: 9251 domestic standard sprinkler system which requires 109 l/min

Multi occupied housing developments with units of more than two floors should have a water supply capable of delivering a minimum of 20 to 35 litres per second through any single hydrant on the development. This equates to 2100l/min, more than adequate for a BS:9251 Residential standard sprinkler system which requires 210 l/min

079-17935 - South Wales Fire and Rescue Service (Vaughan Jenkins)

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: Group Manager Vaughan Jenkins

Organisation (South Wales Fire and Rescue Service):

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes ☒
No ☐
Comments: This method is the most appropriate for implementing the Measure. Without an amendment to Building Regulations which clearly stipulates (by way of a new unambiguous regulation) the requirement to fit automatic water suppression systems in those premises covered by the Measure, it would be possible for applicants to argue that they could demonstrate equivalent levels of safety by other means thus negating the requirement to install sprinklers, thereby circumventing the intent of the Measure.

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes ☒
No ☐
Comments: The list of residences appears appropriate; however more detailed guidance is required regarding the difference between a boarding house and a hotel. Some hotels now house guests on a relatively long term basis, such as families awaiting social housing, providing them with full board. If a premises of this nature , was either newly built or extended and called a hotel by the developers there would be no requirement for sprinklers, if on the other hand in a true reflection of its intended purpose it was called a boarding house sprinklers would be required.

Whilst distinctions such as this may appear pedantic, it is precisely this level of detail which the regulating authorities will have to deal with; more detailed guidance regarding the exact nature of the categories of residence, either in the Measure or as supporting guidance would be essential

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes ☒
No ☐
Comments: For the majority of premises caught by the Measure BS9251 would provide an appropriate standard, whilst for some larger premises BS12845 may be more suitable.

The potential for installers and designers to derogate from the standard should not be excluded; strict adherence to BS9251 would require that only parts conforming to BS9252 would be acceptable. At the moment there are no sprinkler heads available which conform to this standard. The designer should retain the option to use alternative components, as is the case presently, as long as those components are tested to an accepted standard such as UL 1626 where there is a data sheet available which supports their suitability for the application in question. Similarly where a designer chooses to utilise another standard such as NFPA13d for the entire system this should be permissible within the Measure as long as the proposed standard has been robustly tested and found appropriate for the application in which it is to be used.

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes ☒
No ☐
Comments: Whilst some degree of standardisation is necessary over-prescription could have the effect of stifling innovation.
Whatever standard is utilised, the suppression system must be suitable for the application it is being proposed for and must be designed and installed to a recognised standard. In house testing alone should not be acceptable.
Any system installed must be true to the intent of the Measure, providing protection in all those areas of the building caught by the Measure. It should not be sufficient for a designer to propose a system which would protect only the access rooms and escape routes, due cognisance must be given to the fact that 53% of all fire fatalities occur in the room of origin and it is within these rooms that the Measure will have its greatest impact.

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes ☐
No ☒

Comments: For those premises and parts of premises which fall under the Regulatory Reform (Fire Safety) Order 2005 the maintenance of suppression systems can and should be enforced under the Order. Article 17 of the Order states:

17.—(1) Where necessary in order to safeguard the safety of relevant persons the responsible person must ensure that the premises and any facilities, equipment and devices provided in respect of the premises under this Order or, subject to paragraph (6), under any other enactment, including any enactment repealed or revoked by this Order, are subject to a suitable system of maintenance and are maintained in an efficient state, in efficient working order and in good repair.

This is of particular relevance where design freedoms are allowed on the basis of sprinkler provision which would have the effect of reducing the passive structural elements of fire safety such as fire doors, compartmentation and fire resistance.

For those premises and parts of premises which do not fall within the order then, whilst not ideal, the proposal not to regulate is acceptable due to the difficulties which would be experienced in trying to regulate the maintenance of the systems.
If systems are mains fed the maintenance requirements are minimal: the heads and pipework require no maintenance, the only part of the system which requires regular maintenance is the pump which is fitted to tank and pump systems, or the jockey pump if fitted. For this reason mains fed systems should be fitted wherever possible.
The problems of lack of maintenance will reduce over time as market forces come into operation. Currently many householders use service providers to maintain their heating systems and many of these service providers such as gas undertakers have branched out into other areas of house maintenance; it is not unreasonable to assume that these companies will also tender for sprinkler maintenance as it is relatively straightforward.
Additionally some companies are now offering a self starting pump set which turns over weekly or monthly, this would reduce the likelihood of system failure.

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes ☒
No ☐
Comments: This is an essential element of the Measure; householders are largely unaware of the operation and limitations of a sprinkler system. An easily understood guide will reduce the incidence of fire suppression systems being rendered ineffective by over painting of sprinkler heads, placing large items of furniture within close proximity to heads/ nozzles etc.

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes ☐
No ☒
Comments: Whilst it is accepted that the impact for builders, particularly S.M.E.s may be considerable, and that a transitional period of 6 months would in some degree offset the impact, this leaves considerable scope for developers to make Building Regulations applications for large numbers of buildings which could significantly reduce the number of sprinklered buildings in the first three years of the Measure.
The benefits to the building industry from the proposed approach will largely be available to the larger concerns only as they have the financial capacity to acquire land, planning permission and Building Regulations approval, it will be of limited value to S.M.E.s in the industry as they will lack the capacity to forecast and pre-plan to the same degree.
The design implications of the new standard have to a large extent been addressed by existing guidance, system design will be of approved standards which are already available, the design freedoms, or 'trade-offs' are largely those which currently exist within the approved documents and British Standards.
The building industry has had almost two years to address training and supply chain issues, as discussed above the specifications need no development as they are existing.
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Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[4] remain relevant given the proposals covered by the new legislation?

Yes ☒
No ☐
Comments:

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

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Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes ☐
No ☒
Comments:
The cost benefit analysis for Wales follows the same methodology as the 3 previous analyses, these analyses use the 'green book' estimated cost which is based on the Department of Transports cost of a death figure. This figure does not take into account the cost of fire service attendance; this seems incongruous when assessing the cost of fire. It is reasonable to assert that the inclusion of these not insubstantial costs would have a positive effect on the cost benefit analyses, possibly bringing further premises into the cost neutral or cost beneficial outcomes of the analysis.
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080-17935 - South Wales Fire and Rescue Service (Gareth Langdon)

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: G LANGDON

Organisation (South Wales Fire and Rescue Service):

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes ☒
No ☐
Comments: This method is the most appropriate for implementing the Measure. Without an amendment to Building Regulations which clearly stipulates (by way of a new unambiguous regulation) the requirement to fit automatic water suppression systems in those premises covered by the Measure, it would be possible for applicants to argue that they could demonstrate equivalent levels of safety by other means thus negating the requirement to install sprinklers, thereby circumventing the intent of the Measure.

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Whilst distinctions such as this may appear pedantic, it is precisely this level of detail which the regulating authorities will have to deal with; more detailed guidance regarding the exact nature of the categories of residence, either in the Measure or as supporting guidance would be essential

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Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

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Comments: For those premises and parts of premises which fall under the Regulatory Reform (Fire Safety) Order 2005 the maintenance of suppression systems can and should be enforced under the Order. Article 17 of the Order states:

17.—(1) Where necessary in order to safeguard the safety of relevant persons the responsible person must ensure that the premises and any facilities, equipment and devices provided in respect of the premises under this Order or, subject to paragraph (6), under any other enactment, including any enactment repealed or revoked by this Order, are subject to a suitable system of maintenance and are maintained in an efficient state, in efficient working order and in good repair.

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081-17935 - South Wales Fire and Rescue Service (Mathew Bradford)

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: Mathew Bradford

Organisation: South Wales Fire and Rescue Service

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082-17935 - South Wales Fire and Rescue Service (Gary Johnson)

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: Gary Johnson

Organisation : South Wales Fire and Rescue Service

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Chapter 5 Commencement

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Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[7] remain relevant given the proposals covered by the new legislation?

Yes ☒
No ☐
Comments:

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

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Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes ☒ With reservations
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Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes ☐
No ☒
Comments:
The cost benefit analysis for Wales follows the same methodology as the 3 previous analyses, these analyses use the 'green book' estimated cost which is based on the Department of Transports cost of a death figure. This figure does not take into account the cost of fire service attendance; this seems incongruous when assessing the cost of fire. It is reasonable to assert that the inclusion of these not insubstantial costs would have a positive effect on the cost benefit analyses, possibly bringing further premises into the cost neutral or cost beneficial outcomes of the analysis.
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Comments: Option 3 (Do nothing) is considered as having no cost, however whilst it is accepted that this option calls for no capital outlay, doing nothing will not deliver the net benefit predicted for the previous two options, therefore the cost of doing nothing could be as high as £48.8m (option 1)

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Multi occupied housing developments with units of more than two floors should have a water supply capable of delivering a minimum of 20 to 35 litres per second through any single hydrant on the development. This equates to 2100l/min, more than adequate for a BS:9251 Residential standard sprinkler system which requires 210 l/min

083-17935 - South Wales Fire and Rescue Service (David Owen)

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Watch Manager Dai Owen:

Organisation (South Wales Fire and Rescue Service):

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes ☒
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Comments: This method is the most appropriate for implementing the Measure. Without an amendment to Building Regulations which clearly stipulates (by way of a new unambiguous regulation) the requirement to fit automatic water suppression systems in those premises covered by the Measure, it would be possible for applicants to argue that they could demonstrate equivalent levels of safety by other means thus negating the requirement to install sprinklers, thereby circumventing the intent of the Measure.

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Whilst distinctions such as this may appear pedantic, it is precisely this level of detail which the regulating authorities will have to deal with; more detailed guidance regarding the exact nature of the categories of residence, either in the Measure or as supporting guidance would be essential

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Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

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084-17935 - South Wales Fire and Rescue Service (Ken Ralph)

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: Ken Ralph [Home Safety Team]

Organisation (South Wales Fire and Rescue Service):

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085-17935 - South Wales Fire and Rescue Service (Barrie Dickinson)

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: Barrie Dickinson

Organisation (South Wales Fire and Rescue Service):

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Whilst distinctions such as this may appear pedantic, it is precisely this level of detail which the regulating authorities will have to deal with; more detailed guidance regarding the exact nature of the categories of residence, either in the Measure or as supporting guidance would be essential

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes ☒
No ☐
Comments: For the majority of premises caught by the Measure BS9251 would provide an appropriate standard, whilst for some larger premises BS12845 may be more suitable.

The potential for installers and designers to derogate from the standard should not be excluded; strict adherence to BS9251 would require that only parts conforming to BS9252 would be acceptable. At the moment there are no sprinkler heads available which conform to this standard. The designer should retain the option to use alternative components, as is the case presently, as long as those components are tested to an accepted standard such as UL 1626 where there is a data sheet available which supports their suitability for the application in question. Similarly where a designer chooses to utilise another standard such as NFPA13d for the entire system this should be permissible within the Measure as long as the proposed standard has been robustly tested and found appropriate for the application in which it is to be used.

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes ☒
No ☐
Comments: Whilst some degree of standardisation is necessary over-prescription could have the effect of stifling innovation.
Whatever standard is utilised, the suppression system must be suitable for the application it is being proposed for and must be designed and installed to a recognised standard. In house testing alone should not be acceptable.
Any system installed must be true to the intent of the Measure, providing protection in all those areas of the building caught by the Measure. It should not be sufficient for a designer to propose a system which would protect only the access rooms and escape routes, due cognisance must be given to the fact that 53% of all fire fatalities occur in the room of origin and it is within these rooms that the Measure will have its greatest impact.

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes ☐
No ☒

Comments: For those premises and parts of premises which fall under the Regulatory Reform (Fire Safety) Order 2005 the maintenance of suppression systems can and should be enforced under the Order. Article 17 of the Order states:

17.—(1) Where necessary in order to safeguard the safety of relevant persons the responsible person must ensure that the premises and any facilities, equipment and devices provided in respect of the premises under this Order or, subject to paragraph (6), under any other enactment, including any enactment repealed or revoked by this Order, are subject to a suitable system of maintenance and are maintained in an efficient state, in efficient working order and in good repair.

This is of particular relevance where design freedoms are allowed on the basis of sprinkler provision which would have the effect of reducing the passive structural elements of fire safety such as fire doors, compartmentation and fire resistance.

For those premises and parts of premises which do not fall within the order then, whilst not ideal, the proposal not to regulate is acceptable due to the difficulties which would be experienced in trying to regulate the maintenance of the systems.
If systems are mains fed the maintenance requirements are minimal: the heads and pipework require no maintenance, the only part of the system which requires regular maintenance is the pump which is fitted to tank and pump systems, or the jockey pump if fitted. For this reason mains fed systems should be fitted wherever possible.
The problems of lack of maintenance will reduce over time as market forces come into operation. Currently many householders use service providers to maintain their heating systems and many of these service providers such as gas undertakers have branched out into other areas of house maintenance; it is not unreasonable to assume that these companies will also tender for sprinkler maintenance as it is relatively straightforward.
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Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes ☒
No ☐
Comments: This is an essential element of the Measure; householders are largely unaware of the operation and limitations of a sprinkler system. An easily understood guide will reduce the incidence of fire suppression systems being rendered ineffective by over painting of sprinkler heads, placing large items of furniture within close proximity to heads/ nozzles etc.

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes ☐
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Comments: Whilst it is accepted that the impact for builders, particularly S.M.E.s may be considerable, and that a transitional period of 6 months would in some degree offset the impact, this leaves considerable scope for developers to make Building Regulations applications for large numbers of buildings which could significantly reduce the number of sprinklered buildings in the first three years of the Measure.
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Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[10] remain relevant given the proposals covered by the new legislation?

Yes ☒
No ☐
Comments:

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes ☒
No ☐
Comments: The issue of fitness for purpose will not be affected by the implementation of the regulations;
The capacity however may not be sufficient. Consideration should be given to an approvals process for any companies seeking to enter the training provision market in order to reduce any possible reduction in training delivery standards.

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes ☒ With reservations
No ☐
Comments: Whilst the majority of the changes are appropriate, paragraph 18.13 in Approved Document B volume 2 – Buildings Other than Dwellinghouses implies that a sprinkler system installed to BS: 9251 would be appropriate for use when designing a mechanical smoke extraction system for a basement, BS12845 allows a designer to choose a nominal fire size of mW based on assumed maximum area of operation, this is not possible under BS9251 and an assumption of a 5mW fire may be incorrect.
Additionally the issue of duration of supply could have serious implications for firefighters, firefighting in basements is arduous and dangerous, and therefore time must be taken before affecting entry to ensure that all health and safety protocols are being observed. A residential system installed under BS: 9251 has a guaranteed supply of 30 minutes and this is likely to be sufficient to control the fire until internal firefighting operations can be commenced. However a domestic system under 9251 has a guaranteed supply of only 10 minutes and the system would have ceased to operate before firefighting operations can be commenced; this substantially increases the risk to firefighters. Mechanical ventilation of basements should be acceptable only where a BS: 12845, or equivalent, system is provided.

[10] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes ☐
No ☒
Comments:
The cost benefit analysis for Wales follows the same methodology as the 3 previous analyses, these analyses use the 'green book' estimated cost which is based on the Department of Transports cost of a death figure. This figure does not take into account the cost of fire service attendance; this seems incongruous when assessing the cost of fire. It is reasonable to assert that the inclusion of these not insubstantial costs would have a positive effect on the cost benefit analyses, possibly bringing further premises into the cost neutral or cost beneficial outcomes of the analysis.
The costs for tanks and mains connections, even taking into account the sensitivity analyses, are overstated. Many new large scale developments will benefit greatly from economies of scale.

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes ☒With reservations
No ☐
Comments: Option 3 (Do nothing) is considered as having no cost, however whilst it is accepted that this option calls for no capital outlay, doing nothing will not deliver the net benefit predicted for the previous two options, therefore the cost of doing nothing could be as high as £48.8m (option 1)

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

The issues regarding water supply are overstated, the current situation for firefighting water is that the water undertakers are signed up to the Water UK National Guidance Document on Water for Firefighting, despite this they are unable to guarantee the supply for firefighting to the flow requirements of this document. Where these requirements cannot be met the developer is supposed to provide a 45000 litre tank supply for firefighting. The developers take great pains to demonstrate that, whilst the water undertakers will not guarantee supply to the flows and quantity required, the day to day requirements for potable water for general household purposes are such that

at any given time the water supply to the development is adequate to meet the flow requirements for firefighting purposes.
Housing developments with units of detached or semidetached houses of not more than two floors should have a water supply capable of delivering a minimum of eight litres per second through any single hydrant. This equates to 480l/min, more than adequate for a BS: 9251 domestic standard sprinkler system which requires 109 l/min
Multi occupied housing developments with units of more than two floors should have a water supply capable of delivering a minimum of 20 to 35 litres per second through any single hydrant on the development. This equates to 2100l/min, more than adequate for a BS:9251 Residential standard sprinkler system which requires 210 l/min

086-17935 - LABC Cymru (Peter Richards)

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name:- Peter Richards **on behalf of**

Organisation- LABC CYMRU

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes √
No
Comments:- Concerns have been raised regarding the lack of evidence and data which was used to justify and support the introduction of the measure.

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes √
No
Comments:- But restricted by the measure itself. The scope of coverage should have been wider with publicised evidence, considering building type/ risk and age. Also need to consider provisions in advance to cater for the likes of garage and loft conversions i.e spur connections that can be utilised at the time of conversion. How will future adaptations affect existing water tanks, or will sprinkler installations put a stop to the likes of such conversions ?

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes √
No

Comments:- But other specialist alternatives which “deem to satisfy”, proven to be compliant with EN standard could be considered.

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes √
No
Comments:

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes
No √
Comments:

Question 6: Do you agree with the proposal to produce a householder’s guide to encourage the maintenance of fire suppression systems?

Yes √
No
Comments:

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes
No √
Comments: Too soon, should aim for 2015 / 16. Water undertakers are not ready.

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[11] remain relevant given the proposals covered by the new legislation?

Yes ?

[11] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

No ?
Comments: Don’t know.

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes
No √
Comments:

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes √
No
Comments:

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes
No √
Comments: Don’t know can not analyse.

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes
No √
Comments: Insufficient detailed data which doesn’t support the introduction of the measure.

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

087-17935 - South Wales Fire and Rescue Service (David Lozano)

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: David Lozano

Organisation (South Wales Fire and Rescue Service):

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes ☒
No ☐
Comments: This method is the most appropriate for implementing the Measure. Without an amendment to Building Regulations which clearly stipulates (by way of a new unambiguous regulation) the requirement to fit automatic water suppression systems in those premises covered by the Measure, it would be possible for applicants to argue that they could demonstrate equivalent levels of safety by other means thus negating the requirement to install sprinklers, thereby circumventing the intent of the Measure.

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Yes ☒
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Comments: The list of residences appears appropriate; however more detailed guidance is required regarding the difference between a boarding house and a hotel. Some hotels now house guests on a relatively long term basis, such as families awaiting social housing, providing them with full board. If a premises of this nature , was either newly built or extended and called a hotel by the developers there would be no requirement for sprinklers, if on the other hand in a true reflection of its intended purpose it was called a boarding house sprinklers would be required.

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Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes ☐
No ☒

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Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[12] remain relevant given the proposals covered by the new legislation?

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No ☐
Comments:

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088-17935 - South Wales Fire and Rescue Service (Phil Pinches)

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: Phil Pinches

Organisation (South Wales Fire and Rescue Service):

Chapter 2 Proposed approach

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Chapter 5 Commencement

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There is a significant impact for the Fire and Rescue Services in Wales. Each of these Services will be consulted on all Building Regulation applications within their service area for premises which are caught by the Regulatory Reform (Fire Safety) Order 2005. If they are subjected to a large number of large scale developments intended for the following three years this will significantly stretch the available legislative fire safety resources.

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[13] remain relevant given the proposals covered by the new legislation?

Yes ☒
No ☐
Comments:

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes ☒
No ☐
Comments: The issue of fitness for purpose will not be affected by the implementation of the regulations;
The capacity however may not be sufficient. Consideration should be given to an approvals process for any companies seeking to enter the training provision market in order to reduce any possible reduction in training delivery standards.

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes ☒ With reservations
No ☐
Comments: Whilst the majority of the changes are appropriate, paragraph 18.13 in Approved Document B volume 2 – Buildings Other than Dwellinghouses implies that a sprinkler system installed to BS: 9251 would be appropriate for use when designing a mechanical smoke extraction system for a basement, BS12845 allows a designer to choose a nominal fire size of mW based on assumed maximum area of operation, this is not possible under BS9251 and an assumption of a 5mW fire may be incorrect.
Additionally the issue of duration of supply could have serious implications for firefighters, firefighting in basements is arduous and dangerous, and therefore time must be taken before affecting entry to ensure that all health and safety protocols are being observed. A residential system installed under BS: 9251 has a guaranteed supply of 30 minutes and this is likely to be sufficient to control the fire until internal firefighting operations can be commenced. However a domestic system under 9251 has a guaranteed supply of only 10 minutes and the system would have ceased to operate before firefighting operations can be commenced; this substantially increases the risk to firefighters. Mechanical ventilation of basements should be acceptable only where a BS: 12845, or equivalent, system is provided.

[13] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes ☐
No ☒
Comments:
The cost benefit analysis for Wales follows the same methodology as the 3 previous analyses, these analyses use the 'green book' estimated cost which is based on the Department of Transports cost of a death figure. This figure does not take into account the cost of fire service attendance; this seems incongruous when assessing the cost of fire. It is reasonable to assert that the inclusion of these not insubstantial costs would have a positive effect on the cost benefit analyses, possibly bringing further premises into the cost neutral or cost beneficial outcomes of the analysis.
The costs for tanks and mains connections, even taking into account the sensitivity analyses, are overstated. Many new large scale developments will benefit greatly from economies of scale.

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes ☒With reservations
No ☐
Comments: Option 3 (Do nothing) is considered as having no cost, however whilst it is accepted that this option calls for no capital outlay, doing nothing will not deliver the net benefit predicted for the previous two options, therefore the cost of doing nothing could be as high as £48.8m (option 1)

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

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The issues regarding water supply are overstated, the current situation for firefighting water is that the water undertakers are signed up to the Water UK National Guidance Document on Water for Firefighting, despite this they are unable to guarantee the supply for firefighting to the flow requirements of this document. Where these requirements cannot be met the developer is supposed to provide a 45000 litre tank supply for firefighting. The developers take great pains to demonstrate that, whilst the water undertakers will not guarantee supply to the flows and quantity required, the day to day requirements for potable water for general household purposes are such that

at any given time the water supply to the development is adequate to meet the flow requirements for firefighting purposes.
Housing developments with units of detached or semidetached houses of not more than two floors should have a water supply capable of delivering a minimum of eight litres per second through any single hydrant. This equates to 480l/min, more than adequate for a BS: 9251 domestic standard sprinkler system which requires 109 l/min
Multi occupied housing developments with units of more than two floors should have a water supply capable of delivering a minimum of 20 to 35 litres per second through any single hydrant on the development. This equates to 2100l/min, more than adequate for a BS:9251 Residential standard sprinkler system which requires 210 l/min

089-17935 - BAFSA (Ian Gough)

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: Ian Gough MIFireE MBEng

Organisation (if applicable):
British Automatic Fire Sprinkler Association (BAFSA)

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes

Comments:
BAFSA believes that by utilising the devolved powers under the Building Regulations, the Welsh Government is implementing the Measure in the most sensible and practicable way - and without creating more legislation than is necessary.

Furthermore it utilises an existing 'approvals' system and should not unduly increase the burden currently experienced by persons approving building designs; nor will it require them to obtain new skills (indeed, BAFSA routinely responds to requests for advice from building control bodies - and others - and provides continual professional development (CPD) training where requested).

However, many who have been involved in building regulations' applications and enforcement have usually only considered 'life safety' aspects of fire protection and BAFSA would like to see the **'sustainable buildings'** aspiration of the Measure more clearly emphasised to all concerned.

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes

Comments:
BAFSA believes that the list includes the vast majority of premises where lives are lost and injuries occur in fires and is therefore to be welcomed.

However, in relation to hostels, in consideration of the risks posed to persons who generally might be termed as being 'vulnerable' but where only 'short term' accommodation is provided, it is disappointing to see that these premises are being excluded.

Therefore, in these cases where hostels are providing the only shelter some persons have (and who would otherwise be living on the streets) albeit for only a short term; are outside of NHS or Prison Service control and are clearly not being utilised for paying guests (as in a hotel), further consideration should be given to including these premises within the ambit of the Measure.

It should perhaps be noted that contrary to paragraph 30 of the Consultation Document, in Scotland, all new residential care homes and sheltered housing also require sprinkler protection.

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes

Comments:
Without reference to any recognised design and installation code, the Measure could give rise to a plethora of *ad hoc*, non approved, fire suppression systems that would not achieve the desired outcomes.

Furthermore, notwithstanding the risks to life and property, this would increase the burden placed on building control regarding the need for individual systems to be subject to some form of approval which would inevitably lead to unnecessary conflict; delays and additional costs by all parties.

BAFSA therefore strongly believes that it is incumbent on all fire safety professionals and consumers to support the use of published British Standards - whenever possible - so that Building Regulations' applications can be efficiently processed and buildings fitted with products and systems that are fit for purpose.

However, see the comment below.

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes

Comments:
BAFSA believes that a degree of flexibility is essential and therefore would not wish to see solutions restricted to BS9251 systems only but would expect the Measure, and any supporting guidance, to allow the use of sprinkler systems and water mist systems intended for use in residential premises when these comply with either British Standards or CEN standards, or in the absence of these, other international standards approved by ISO or a national standards body.

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes

Comments:
However, it is should be noted that where a fire suppression system is installed for the safety of life in premises or parts of premises subject to the Regulatory Reform (Fire Safety) Order 2005, Article 17 requires such systems to be 'subject to a suitable system of maintenance and are maintained in an efficient state, in efficient working order and in good repair'.

BAFSA suggests that it should also be a specific offence to maliciously or recklessly interfere with or damage a fire suppression system installed under this Measure.

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes

Comments:
This matter is already recommended in BS 9251 and most competent contractors will supply such information now. However, if invited to by the Welsh Government, BAFSA would be pleased to assist in the production of specific guidance and documentation for use in Wales.

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes

Comments:
BAFSA fully supports the proposal which is not dissimilar to other previous changes to building regulations in the UK.

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[14] remain relevant given the proposals covered by the new legislation?

Yes

Comments:
The Measure will create new work opportunities for persons who currently work in the fire suppression industry; however, in view of the application of the Measure to domestic properties, will also create employment opportunities for persons currently outside of the fire suppression industry e.g. in plumbing and related building engineering trades.

Indeed, BAFSA firmly expects that this legislation will generate the creation of new businesses in Wales and/or provide opportunities for existing small and medium enterprises (SMEs) to diversify their activities.

BAFSA has therefore, together with the Fire Industry Association (FIA), committed significant resources to the production of the National Occupational Standard (NOS) for Mechanical Fire Protection and continues to work with other partners - particularly the Fire Sector Federation - to ensure the NOS remains relevant.

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes

Comments:
In addition to the comment above (Q8), BAFSA is committed to assisting with both the improvement and expansion of training opportunities relevant to

[14] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

installing automatic fire suppression systems in all buildings - but especially those covered by the Measure.

In particular, BAFSA views it as a priority to focus on training for those persons who hitherto have not operated in the fire suppression industry by enabling persons, from as wide a background as possible, to enter the industry via ‘up-skilling’ and building upon existing vocational training.

An excellent working relationship has already been formed with Neath Port Talbot College (NPT) which has already generated interest from persons in Wales, and elsewhere in the UK, who are keen to enrol on fire sprinkler installation courses.

The fire suppression industry is providing both technical and material support to NPT; in return, the College is assisting in the development of industry related qualifications. It is expected that this arrangement will continue for the foreseeable future and to our mutual benefit.

Nevertheless, where other training providers emerge and who also offer quality and value for money courses etc, BAFSA will be willing to assist such organisations in order to ensure that installations are designed and installed by a competent workforce.

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes

Comments:
BAFSA believes that, as far as they go, the changes indicated are sensible.

However, from experience, BAFSA is aware of increasing numbers of cases where fire suppression systems are being installed to overcome difficulties in compliance with building standards and where customers seek an alternative approach to the traditional fire safety strategies (that invariably rely upon ‘compartmentalisation’). This is increasingly the case for properties where elderly or disabled persons live and where difficulties are experienced with manoeuvring through fire resisting doorways etc.

It would therefore be prudent to develop further the content of the relevant Approved Document (AD) to enable additional benefits to be achieved as a result of the implementation of the Measure – thus improving further the cost/benefits that have already been established – and even, in some cases, resulting in a cost neutral situation.

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

No

Comments:
In addition to the comment above (Q10) regarding improvements to the AD, BAFSA believes that the cost benefit analysis (based on the information available at the time) is a reasonably fair exposition of the issues under consideration and, bearing in mind the understandable concerns of builders and others in a period of austerity, does not underplay the potential expenditure that may be necessary to comply with the Measure.

However, BAFSA is aware that where automatic fire suppression systems are installed in **new domestic** properties, the vast majority of such installations rely upon a simple town main connection that will be less expensive than the figures quoted. This experience comes from installations completed here and in other countries around the world.

Therefore, subject to the continuing co-operation and support of the water companies, and the ability to supply water for both domestic and fire sprinkler purposes via a single connection, the costs indicated could be reduced.

Furthermore, economies of scale will certainly allow for even lower costs where multiples of a single design are constructed at the same time.

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

No

Comments:
BAFSA believes that the issue of increasing fire risks associated with modern methods of construction – in particular timber framed construction – has not been fully addressed. This concern has recently been raised in a number of publications notably the Fire Protection Association (FPA) in a report: *'Building Design and Management - Fire in timber frame buildings - A review of statistics from the UK and the USA – 2011'* that indicates the growing numbers of such buildings in Wales and the logical conclusion of heightened risks where sprinklers are not fitted. We are particularly concerned at the suggestions in some part of the construction industry press that there is nothing untoward about constructing taller and taller timber framed buildings. Based on the FPA report referenced above it is BAFSA's views that all timber framed buildings above three storeys should be constructed with sprinkler protection.

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

090-17935 - South Wales Fire and Rescue Service (David Hughes)

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

David Hughes

Organisation (South Wales Fire and Rescue Service):

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes ☒
No ☐
Comments: This method is the most appropriate for implementing the Measure. Without an amendment to Building Regulations which clearly stipulates (by way of a new unambiguous regulation) the requirement to fit automatic water suppression systems in those premises covered by the Measure, it would be possible for applicants to argue that they could demonstrate equivalent levels of safety by other means thus negating the requirement to install sprinklers, thereby circumventing the intent of the Measure.

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes ☒
No ☐
Comments: The list of residences appears appropriate; however more detailed guidance is required regarding the difference between a boarding house and a hotel. Some hotels now house guests on a relatively long term basis, such as families awaiting social housing, providing them with full board. If a premises of this nature , was either newly built or extended and called a hotel by the developers there would be no requirement for sprinklers, if on the other hand in a true reflection of its intended purpose it was called a boarding house sprinklers would be required.

Whilst distinctions such as this may appear pedantic, it is precisely this level of detail which the regulating authorities will have to deal with; more detailed guidance regarding the exact nature of the categories of residence, either in the Measure or as supporting guidance would be essential

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes ☒
No ☐
Comments: For the majority of premises caught by the Measure BS9251 would provide an appropriate standard, whilst for some larger premises BS12845 may be more suitable.

The potential for installers and designers to derogate from the standard should not be excluded; strict adherence to BS9251 would require that only parts conforming to BS9252 would be acceptable. At the moment there are no sprinkler heads available which conform to this standard. The designer should retain the option to use alternative components, as is the case presently, as long as those components are tested to an accepted standard such as UL 1626 where there is a data sheet available which supports their suitability for the application in question. Similarly where a designer chooses to utilise another standard such as NFPA13d for the entire system this should be permissible within the Measure as long as the proposed standard has been robustly tested and found appropriate for the application in which it is to be used.

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes ☒
No ☐
Comments: Whilst some degree of standardisation is necessary over-prescription could have the effect of stifling innovation.
Whatever standard is utilised, the suppression system must be suitable for the application it is being proposed for and must be designed and installed to a recognised standard. In house testing alone should not be acceptable.
Any system installed must be true to the intent of the Measure, providing protection in all those areas of the building caught by the Measure. It should not be sufficient for a designer to propose a system which would protect only the access rooms and escape routes, due cognisance must be given to the fact that 53% of all fire fatalities occur in the room of origin and it is within these rooms that the Measure will have its greatest impact.

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes ☐
No ☒

Comments: For those premises and parts of premises which fall under the Regulatory Reform (Fire Safety) Order 2005 the maintenance of suppression systems can and should be enforced under the Order. Article 17 of the Order states:

17.—(1) Where necessary in order to safeguard the safety of relevant persons the responsible person must ensure that the premises and any facilities, equipment and devices provided in respect of the premises under this Order or, subject to paragraph (6), under any other enactment, including any enactment repealed or revoked by this Order, are subject to a suitable system of maintenance and are maintained in an efficient state, in efficient working order and in good repair.

This is of particular relevance where design freedoms are allowed on the basis of sprinkler provision which would have the effect of reducing the passive structural elements of fire safety such as fire doors, compartmentation and fire resistance.

For those premises and parts of premises which do not fall within the order then, whilst not ideal, the proposal not to regulate is acceptable due to the difficulties which would be experienced in trying to regulate the maintenance of the systems.
If systems are mains fed the maintenance requirements are minimal: the heads and pipework require no maintenance, the only part of the system which requires regular maintenance is the pump which is fitted to tank and pump systems, or the jockey pump if fitted. For this reason mains fed systems should be fitted wherever possible.
The problems of lack of maintenance will reduce over time as market forces come into operation. Currently many householders use service providers to maintain their heating systems and many of these service providers such as gas undertakers have branched out into other areas of house maintenance; it is not unreasonable to assume that these companies will also tender for sprinkler maintenance as it is relatively straightforward.
Additionally some companies are now offering a self starting pump set which turns over weekly or monthly, this would reduce the likelihood of system failure.

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes ☒
No ☐
Comments: This is an essential element of the Measure; householders are largely unaware of the operation and limitations of a sprinkler system. An easily understood guide will reduce the incidence of fire suppression systems being rendered ineffective by over painting of sprinkler heads, placing large items of furniture within close proximity to heads/ nozzles etc.

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes ☐
No ☒
Comments: Whilst it is accepted that the impact for builders, particularly S.M.E.s may be considerable, and that a transitional period of 6 months would in some degree offset the impact, this leaves considerable scope for developers to make Building Regulations applications for large numbers of buildings which could significantly reduce the number of sprinklered buildings in the first three years of the Measure.
The benefits to the building industry from the proposed approach will largely be available to the larger concerns only as they have the financial capacity to acquire land, planning permission and Building Regulations approval, it will be of limited value to S.M.E.s in the industry as they will lack the capacity to forecast and pre-plan to the same degree.
The design implications of the new standard have to a large extent been addressed by existing guidance, system design will be of approved standards which are already available, the design freedoms, or 'trade-offs' are largely those which currently exist within the approved documents and British Standards.
The building industry has had almost two years to address training and supply chain issues, as discussed above the specifications need no development as they are existing.
There is a significant impact for the Fire and Rescue Services in Wales. Each of these Services will be consulted on all Building Regulation applications within their service area for premises which are caught by the Regulatory Reform (Fire Safety) Order 2005. If they are subjected to a large number of large scale developments intended for the following three years this will significantly stretch the available legislative fire safety resources.

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[15] remain relevant given the proposals covered by the new legislation?

Yes ☒
No ☐
Comments:

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No ☐
Comments: The issue of fitness for purpose will not be affected by the implementation of the regulations;
The capacity however may not be sufficient. Consideration should be given to an approvals process for any companies seeking to enter the training provision market in order to reduce any possible reduction in training delivery standards.

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091-17935 - South Wales Fire and Rescue Service (Rob Morris)

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: Rob Morris

Organisation (South Wales Fire and Rescue Service):

Chapter 2 Proposed approach

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Yes ☒
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Chapter 3 Design, testing and installation of residential fire suppression systems

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Yes ☒
No ☐
Comments: For the majority of premises caught by the Measure BS9251 would provide an appropriate standard, whilst for some larger premises BS12845 may be more suitable.

The potential for installers and designers to derogate from the standard should not be excluded; strict adherence to BS9251 would require that only parts conforming to BS9252 would be acceptable. At the moment there are no sprinkler heads available which conform to this standard. The designer should retain the option to use alternative components, as is the case presently, as long as those components are tested to an accepted standard such as UL 1626 where there is a data sheet available which supports their suitability for the application in question. Similarly where a designer chooses to utilise another standard such as NFPA13d for the entire system this should be permissible within the Measure as long as the proposed standard has been robustly tested and found appropriate for the application in which it is to be used.

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Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes ☐
No ☒

Comments: For those premises and parts of premises which fall under the Regulatory Reform (Fire Safety) Order 2005 the maintenance of suppression systems can and should be enforced under the Order. Article 17 of the Order states:

17.—(1) Where necessary in order to safeguard the safety of relevant persons the responsible person must ensure that the premises and any facilities, equipment and devices provided in respect of the premises under this Order or, subject to paragraph (6), under any other enactment, including any enactment repealed or revoked by this Order, are subject to a suitable system of maintenance and are maintained in an efficient state, in efficient working order and in good repair.

This is of particular relevance where design freedoms are allowed on the basis of sprinkler provision which would have the effect of reducing the passive structural elements of fire safety such as fire doors, compartmentation and fire resistance.

For those premises and parts of premises which do not fall within the order then, whilst not ideal, the proposal not to regulate is acceptable due to the difficulties which would be experienced in trying to regulate the maintenance of the systems.
If systems are mains fed the maintenance requirements are minimal: the heads and pipework require no maintenance, the only part of the system which requires regular maintenance is the pump which is fitted to tank and pump systems, or the jockey pump if fitted. For this reason mains fed systems should be fitted wherever possible.
The problems of lack of maintenance will reduce over time as market forces come into operation. Currently many householders use service providers to maintain their heating systems and many of these service providers such as gas undertakers have branched out into other areas of house maintenance; it is not unreasonable to assume that these companies will also tender for sprinkler maintenance as it is relatively straightforward.
Additionally some companies are now offering a self starting pump set which turns over weekly or monthly, this would reduce the likelihood of system failure.

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes ☒
No ☐
Comments: This is an essential element of the Measure; householders are largely unaware of the operation and limitations of a sprinkler system. An easily understood guide will reduce the incidence of fire suppression systems being rendered ineffective by over painting of sprinkler heads, placing large items of furniture within close proximity to heads/ nozzles etc.

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes ☐
No ☒
Comments: Whilst it is accepted that the impact for builders, particularly S.M.E.s may be considerable, and that a transitional period of 6 months would in some degree offset the impact, this leaves considerable scope for developers to make Building Regulations applications for large numbers of buildings which could significantly reduce the number of sprinklered buildings in the first three years of the Measure.
The benefits to the building industry from the proposed approach will largely be available to the larger concerns only as they have the financial capacity to acquire land, planning permission and Building Regulations approval, it will be of limited value to S.M.E.s in the industry as they will lack the capacity to forecast and pre-plan to the same degree.
The design implications of the new standard have to a large extent been addressed by existing guidance, system design will be of approved standards which are already available, the design freedoms, or 'trade-offs' are largely those which currently exist within the approved documents and British Standards.
The building industry has had almost two years to address training and supply chain issues, as discussed above the specifications need no development as they are existing.
There is a significant impact for the Fire and Rescue Services in Wales. Each of these Services will be consulted on all Building Regulation applications within their service area for premises which are caught by the Regulatory Reform (Fire Safety) Order 2005. If they are subjected to a large number of large scale developments intended for the following three years this will significantly stretch the available legislative fire safety resources.

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[16] remain relevant given the proposals covered by the new legislation?

Yes ☒
No ☐
Comments:

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes ☒
No ☐
Comments: The issue of fitness for purpose will not be affected by the implementation of the regulations;
The capacity however may not be sufficient. Consideration should be given to an approvals process for any companies seeking to enter the training provision market in order to reduce any possible reduction in training delivery standards.

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes ☒ With reservations
No ☐
Comments: Whilst the majority of the changes are appropriate, paragraph 18.13 in Approved Document B volume 2 – Buildings Other than Dwellinghouses implies that a sprinkler system installed to BS: 9251 would be appropriate for use when designing a mechanical smoke extraction system for a basement, BS12845 allows a designer to choose a nominal fire size of mW based on assumed maximum area of operation, this is not possible under BS9251 and an assumption of a 5mW fire may be incorrect.
Additionally the issue of duration of supply could have serious implications for firefighters, firefighting in basements is arduous and dangerous, and therefore time must be taken before affecting entry to ensure that all health and safety protocols are being observed. A residential system installed under BS: 9251 has a guaranteed supply of 30 minutes and this is likely to be sufficient to control the fire until internal firefighting operations can be commenced. However a domestic system under 9251 has a guaranteed supply of only 10 minutes and the system would have ceased to operate before firefighting operations can be commenced; this substantially increases the risk to firefighters. Mechanical ventilation of basements should be acceptable only where a BS: 12845, or equivalent, system is provided.

[16] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes ☐
No ☒
Comments:
The cost benefit analysis for Wales follows the same methodology as the 3 previous analyses, these analyses use the 'green book' estimated cost which is based on the Department of Transports cost of a death figure. This figure does not take into account the cost of fire service attendance; this seems incongruous when assessing the cost of fire. It is reasonable to assert that the inclusion of these not insubstantial costs would have a positive effect on the cost benefit analyses, possibly bringing further premises into the cost neutral or cost beneficial outcomes of the analysis.
The costs for tanks and mains connections, even taking into account the sensitivity analyses, are overstated. Many new large scale developments will benefit greatly from economies of scale.

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes ☒With reservations
No ☐
Comments: Option 3 (Do nothing) is considered as having no cost, however whilst it is accepted that this option calls for no capital outlay, doing nothing will not deliver the net benefit predicted for the previous two options, therefore the cost of doing nothing could be as high as £48.8m (option 1)

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

The issues regarding water supply are overstated, the current situation for firefighting water is that the water undertakers are signed up to the Water UK National Guidance Document on Water for Firefighting, despite this they are unable to guarantee the supply for firefighting to the flow requirements of this document. Where these requirements cannot be met the developer is supposed to provide a 45000 litre tank supply for firefighting. The developers take great pains to demonstrate that, whilst the water undertakers will not guarantee supply to the flows and quantity required, the day to day requirements for potable water for general household purposes are such that

at any given time the water supply to the development is adequate to meet the flow requirements for firefighting purposes.
Housing developments with units of detached or semidetached houses of not more than two floors should have a water supply capable of delivering a minimum of eight litres per second through any single hydrant. This equates to 480l/min, more than adequate for a BS: 9251 domestic standard sprinkler system which requires 109 l/min
Multi occupied housing developments with units of more than two floors should have a water supply capable of delivering a minimum of 20 to 35 litres per second through any single hydrant on the development. This equates to 2100l/min, more than adequate for a BS:9251 Residential standard sprinkler system which requires 210 l/min

092-17935 - South Wales Fire and Rescue Service (Richard Hassett)

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: RJ Hassett

Organisation (South Wales Fire and Rescue Service):

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes ☒
No ☐
Comments: This method is the most appropriate for implementing the Measure. Without an amendment to Building Regulations which clearly stipulates (by way of a new unambiguous regulation) the requirement to fit automatic water suppression systems in those premises covered by the Measure, it would be possible for applicants to argue that they could demonstrate equivalent levels of safety by other means thus negating the requirement to install sprinklers, thereby circumventing the intent of the Measure.

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes ☒
No ☐
Comments: The list of residences appears appropriate; however more detailed guidance is required regarding the difference between a boarding house and a hotel. Some hotels now house guests on a relatively long term basis, such as families awaiting social housing, providing them with full board. If a premises of this nature , was either newly built or extended and called a hotel by the developers there would be no requirement for sprinklers, if on the other hand in a true reflection of its intended purpose it was called a boarding house sprinklers would be required.

Whilst distinctions such as this may appear pedantic, it is precisely this level of detail which the regulating authorities will have to deal with; more detailed guidance regarding the exact nature of the categories of residence, either in the Measure or as supporting guidance would be essential

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes ☒
No ☐
Comments: For the majority of premises caught by the Measure BS9251 would provide an appropriate standard, whilst for some larger premises BS12845 may be more suitable.

The potential for installers and designers to derogate from the standard should not be excluded; strict adherence to BS9251 would require that only parts conforming to BS9252 would be acceptable. At the moment there are no sprinkler heads available which conform to this standard. The designer should retain the option to use alternative components, as is the case presently, as long as those components are tested to an accepted standard such as UL 1626 where there is a data sheet available which supports their suitability for the application in question. Similarly where a designer chooses to utilise another standard such as NFPA13d for the entire system this should be permissible within the Measure as long as the proposed standard has been robustly tested and found appropriate for the application in which it is to be used.

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes ☒
No ☐
Comments: Whilst some degree of standardisation is necessary over-prescription could have the effect of stifling innovation.
Whatever standard is utilised, the suppression system must be suitable for the application it is being proposed for and must be designed and installed to a recognised standard. In house testing alone should not be acceptable.
Any system installed must be true to the intent of the Measure, providing protection in all those areas of the building caught by the Measure. It should not be sufficient for a designer to propose a system which would protect only the access rooms and escape routes, due cognisance must be given to the fact that 53% of all fire fatalities occur in the room of origin and it is within these rooms that the Measure will have its greatest impact.

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes ☐
No ☒

Comments: For those premises and parts of premises which fall under the Regulatory Reform (Fire Safety) Order 2005 the maintenance of suppression systems can and should be enforced under the Order. Article 17 of the Order states:

17.—(1) Where necessary in order to safeguard the safety of relevant persons the responsible person must ensure that the premises and any facilities, equipment and devices provided in respect of the premises under this Order or, subject to paragraph (6), under any other enactment, including any enactment repealed or revoked by this Order, are subject to a suitable system of maintenance and are maintained in an efficient state, in efficient working order and in good repair.

This is of particular relevance where design freedoms are allowed on the basis of sprinkler provision which would have the effect of reducing the passive structural elements of fire safety such as fire doors, compartmentation and fire resistance.

For those premises and parts of premises which do not fall within the order then, whilst not ideal, the proposal not to regulate is acceptable due to the difficulties which would be experienced in trying to regulate the maintenance of the systems.
If systems are mains fed the maintenance requirements are minimal: the heads and pipework require no maintenance, the only part of the system which requires regular maintenance is the pump which is fitted to tank and pump systems, or the jockey pump if fitted. For this reason mains fed systems should be fitted wherever possible.
The problems of lack of maintenance will reduce over time as market forces come into operation. Currently many householders use service providers to maintain their heating systems and many of these service providers such as gas undertakers have branched out into other areas of house maintenance; it is not unreasonable to assume that these companies will also tender for sprinkler maintenance as it is relatively straightforward.
Additionally some companies are now offering a self starting pump set which turns over weekly or monthly, this would reduce the likelihood of system failure.

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes ☒
No ☐
Comments: This is an essential element of the Measure; householders are largely unaware of the operation and limitations of a sprinkler system. An easily understood guide will reduce the incidence of fire suppression systems being rendered ineffective by over painting of sprinkler heads, placing large items of furniture within close proximity to heads/ nozzles etc.

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes ☐
No ☒
Comments: Whilst it is accepted that the impact for builders, particularly S.M.E.s may be considerable, and that a transitional period of 6 months would in some degree offset the impact, this leaves considerable scope for developers to make Building Regulations applications for large numbers of buildings which could significantly reduce the number of sprinklered buildings in the first three years of the Measure.
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Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[17] remain relevant given the proposals covered by the new legislation?

Yes ☒
No ☐
Comments:

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Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes ☒ With reservations
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093-17935 - South Wales Fire and Rescue Service (Lawrence Morris)

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: Lawrence Morris

Organisation (South Wales Fire and Rescue Service):

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes ☒
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Chapter 5 Commencement

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No ☒
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Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[18] remain relevant given the proposals covered by the new legislation?

Yes ☒
No ☐
Comments:

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes ☒
No ☐
Comments: The issue of fitness for purpose will not be affected by the implementation of the regulations;
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Question 10: Do you agree with the proposed changes to the Approved Documents?

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operations can be commenced; this substantially increases the risk to firefighters. Mechanical ventilation of basements should be acceptable only where a BS: 12845, or equivalent, system is provided.

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes ☐
No ☒
Comments:
The cost benefit analysis for Wales follows the same methodology as the 3 previous analyses, these analyses use the 'green book' estimated cost which is based on the Department of Transports cost of a death figure. This figure does not take into account the cost of fire service attendance; this seems incongruous when assessing the cost of fire. It is reasonable to assert that the inclusion of these not insubstantial costs would have a positive effect on the cost benefit analyses, possibly bringing further premises into the cost neutral or cost beneficial outcomes of the analysis.
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Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes ☒With reservations
No ☐
Comments: Option 3 (Do nothing) is considered as having no cost, however whilst it is accepted that this option calls for no capital outlay, doing nothing will not deliver the net benefit predicted for the previous two options, therefore the cost of doing nothing could be as high as £48.8m (option 1)

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supposed to provide a 45000 litre tank supply for firefighting. The developers take great pains to demonstrate that, whilst the water undertakers will not guarantee supply to the flows and quantity required, the day to day requirements for potable water for general household purposes are such that at any given time the water supply to the development is adequate to meet the flow requirements for firefighting purposes.

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094-17935 - London Fire and Emergency Planning Authority

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: Nigel Firkins

Organisation: London Fire & Emergency Planning Authority

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes X
No ☐
Comments: We agree that the existing regulatory framework of building control presents a tried and tested regulatory system.

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes X
No ☐
Comments: Within London our focus has been to promote the installation of sprinklers in the homes of vulnerable people. These are people who have a higher likelihood of having a fire and a higher consequence from that fire because they cannot easily self evacuate.

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes X
No ☐
Comments: BS 9251 “Sprinkler systems for residential and domestic occupancies – Code of practice” is an appropriate standard. The BSI are in the process of reviewing and revising the standard and this work should make

designing, installing, commissioning and maintaining these sprinkler systems easier.

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes X
No ☐
Comments: It is important that there is the flexibility to use innovative technology such as watermist, provided that it can be shown that it is fit for the intended purpose. The wording in the second paragraph of the current version of ADB – volume 2, section 0.16 addresses this issue and should be retained.

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes ☐
No X
Comments: It is important that sprinkler systems are maintained so that they will provide reliable performance throughout their life. BS 9251 indicates that *"maintenance is essential".*

There are alternative approaches to maintenance that may not require additional new regulation.

For example in premises where the *"The Regulatory Reform (Fire Safety) Order 2005"* (FSO) applies it could and should be used to regulate the maintenance of the sprinkler system. Both article 17 and article 38 of the FSO are relevant to the maintenance of sprinkler systems.

In premises where the FSO only applies to the common parts of the building, for example in blocks of flats, the sprinkler system should be designed so that maintenance can be carried out, as far as possible, from the common parts.

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes X
No ☐
Comments: The householder's guide should include the advice that when buying or letting a property, information about the maintenance of the sprinkler system should be requested, along with the relevant documentation.

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes X

No ☐
Comments: The proposed timeframe seems reasonable.

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[19] remain relevant given the proposals covered by the new legislation?

Yes X
No ☐
Comments: The National Occupational Standards are relevant. We agree that third party certification schemes offer benefits in helping to ensure that sprinkler contractors are offering the correct level of quality, reliability and safety.

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes ☐
No ☐
Comments: No view

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes ☐
No X
Comments: There appears to be a differing approach applied to the potential use of alternative or innovative suppression systems. In the proposals for ADB –volume 1 they are included in section 2.5. In the proposals for ADB volume 2 they are specifically excluded in section 2.3.
As previously indicated in our response to question 4 (above) the regulations and guidance should be flexible and allow new technology in all building types, provided that they are fit for the intended purpose.

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes X
No ☐

[19] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

Comments: Note: A detailed analysis has not been done.

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes X
No ☐
Comments:

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

095-17935 - South Wales Fire and Rescue Service (David Baxter)

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: David Baxter

Organisation (South Wales Fire and Rescue Service):

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes ☒
No ☐
Comments: This method is the most appropriate for implementing the Measure. Without an amendment to Building Regulations which clearly stipulates (by way of a new unambiguous regulation) the requirement to fit automatic water suppression systems in those premises covered by the measure. It would be possible for applicants to argue that they could demonstrate equivalent levels of safety by other means thus negating the requirement to install sprinklers, thereby circumventing the intent of the measure.

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes ☒
No ☐
Comments: The list of residences appears appropriate; however more detailed guidance is required regarding the difference between a boarding house and a hotel. Some hotels now house guests on a relatively long term basis, such as families awaiting social housing, providing them with full board. If a premises of this nature , was either newly built or extended and called a hotel by the developers there would be no requirement for sprinklers, if on the other hand in a true reflection of its intended purpose it was called a boarding house sprinklers would be required.

Whilst distinctions such as this may appear pedantic, it is precisely this level of detail which the regulating authorities will have to deal with; more detailed guidance regarding the exact nature of the categories of residence, either in the Measure or as supporting guidance would be essential

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes ☒
No ☐
Comments: For the majority of premises caught by the Measure BS9251 would provide an appropriate standard, whilst for some larger premises BS12845 may be more suitable.

The potential for installers and designers to derogate from the standard should not be excluded; strict adherence to BS9251 would require that only parts conforming to BS9252 would be acceptable. At the moment there are no sprinkler heads available which conform to this standard. The designer should retain the option to use alternative components, as is the case presently, as long as those components are tested to an accepted standard such as UL 1626 where there is a data sheet available which supports their suitability for the application in question. Similarly where a designer chooses to utilise another standard such as NFPA13d for the entire system this should be permissible within the Measure as long as the proposed standard has been robustly tested and found appropriate for the application in which it is to be used.

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes ☒
No ☐
Comments: Whilst some degree of standardisation is necessary over-prescription could have the effect of stifling innovation.
Whatever standard is utilised, the suppression system must be suitable for the application it is being proposed for and must be designed and installed to a recognised standard. In house testing alone should not be acceptable.
Any system installed must be true to the intent of the Measure, providing protection in all those areas of the building caught by the Measure. It should not be sufficient for a designer to propose a system which would protect only the access rooms and escape routes, due cognisance must be given to the fact that 53% of all fire fatalities occur in the room of origin and it is within these rooms that the Measure will have its greatest impact.

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes ☐
No ☒

Comments: For those premises and parts of premises which fall under the Regulatory Reform (Fire Safety) Order 2005 the maintenance of suppression systems can and should be enforced under the Order. Article 17 of the Order states:

17.—(1) Where necessary in order to safeguard the safety of relevant persons the responsible person must ensure that the premises and any facilities, equipment and devices provided in respect of the premises under this Order or, subject to paragraph (6), under any other enactment, including any enactment repealed or revoked by this Order, are subject to a suitable system of maintenance and are maintained in an efficient state, in efficient working order and in good repair.

This is of particular relevance where design freedoms are allowed on the basis of sprinkler provision which would have the effect of reducing the passive structural elements of fire safety such as fire doors, compartmentation and fire resistance.

For those premises and parts of premises which do not fall within the order then, whilst not ideal, the proposal not to regulate is acceptable due to the difficulties which would be experienced in trying to regulate the maintenance of the systems.
If systems are mains fed the maintenance requirements are minimal: the heads and pipework require no maintenance, the only part of the system which requires regular maintenance is the pump which is fitted to tank and pump systems, or the jockey pump if fitted. For this reason mains fed systems should be fitted wherever possible.
The problems of lack of maintenance will reduce over time as market forces come into operation. Currently many householders use service providers to maintain their heating systems and many of these service providers such as gas undertakers have branched out into other areas of house maintenance; it is not unreasonable to assume that these companies will also tender for sprinkler maintenance as it is relatively straightforward.
Additionally some companies are now offering a self starting pump set which turns over weekly or monthly, this would reduce the likelihood of system failure.

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes ☒
No ☐
Comments: This is an essential element of the Measure; householders are largely unaware of the operation and limitations of a sprinkler system. An easily understood guide will reduce the incidence of fire suppression systems being rendered ineffective by over painting of sprinkler heads, placing large items of furniture within close proximity to heads/ nozzles etc.

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes ☐
No ☒
Comments: Whilst it is accepted that the impact for builders, particularly S.M.E.s may be considerable, and that a transitional period of 6 months would in some degree offset the impact, this leaves considerable scope for developers to make Building Regulations applications for large numbers of buildings which could significantly reduce the number of sprinklered buildings in the first three years of the Measure.
The benefits to the building industry from the proposed approach will largely be available to the larger concerns only as they have the financial capacity to acquire land, planning permission and Building Regulations approval, it will be of limited value to S.M.E.s in the industry as they will lack the capacity to forecast and pre-plan to the same degree.
The design implications of the new standard have to a large extent been addressed by existing guidance, system design will be of approved standards which are already available, the design freedoms, or 'trade-offs' are largely those which currently exist within the approved documents and British Standards.
The building industry has had almost two years to address training and supply chain issues, as discussed above the specifications need no development as they are existing.
There is a significant impact for the Fire and Rescue Services in Wales. Each of these Services will be consulted on all Building Regulation applications within their service area for premises which are caught by the Regulatory Reform (Fire Safety) Order 2005. If they are subjected to a large number of large scale developments intended for the following three years this will significantly stretch the available legislative fire safety resources.

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[20] remain relevant given the proposals covered by the new legislation?

Yes ☒
No ☐
Comments:

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes ☒
No ☐
Comments: The issue of fitness for purpose will not be affected by the implementation of the regulations;
The capacity however may not be sufficient. Consideration should be given to an approvals process for any companies seeking to enter the training provision market in order to reduce any possible reduction in training delivery standards.

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes ☒ With reservations
No ☐
Comments: Whilst the majority of the changes are appropriate, paragraph 18.13 in Approved Document B volume 2 – Buildings Other than Dwellinghouses implies that a sprinkler system installed to BS: 9251 would be appropriate for use when designing a mechanical smoke extraction system for a basement, BS12845 allows a designer to choose a nominal fire size of mW based on assumed maximum area of operation, this is not possible under BS9251 and an assumption of a 5mW fire may be incorrect.
Additionally the issue of duration of supply could have serious implications for firefighters, firefighting in basements is arduous and dangerous, and therefore time must be taken before affecting entry to ensure that all health and safety protocols are being observed. A residential system installed under BS: 9251 has a guaranteed supply of 30 minutes and this is likely to be sufficient to control the fire until internal firefighting operations can be commenced. However a domestic system under 9251 has a guaranteed supply of only 10 minutes and the system would have ceased to operate before firefighting operations can be commenced; this substantially increases the risk to firefighters. Mechanical ventilation of basements should be acceptable only where a BS: 12845, or equivalent, system is provided.

[20] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes ☐
No ☒
Comments:
The cost benefit analysis for Wales follows the same methodology as the 3 previous analyses, these analyses use the 'green book' estimated cost which is based on the Department of Transports cost of a death figure. This figure does not take into account the cost of fire service attendance; this seems incongruous when assessing the cost of fire. It is reasonable to assert that the inclusion of these not insubstantial costs would have a positive effect on the cost benefit analyses, possibly bringing further premises into the cost neutral or cost beneficial outcomes of the analysis.
The costs for tanks and mains connections, even taking into account the sensitivity analyses, are overstated. Many new large scale developments will benefit greatly from economies of scale.

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes ☒With reservations
No ☐
Comments: Option 3 (Do nothing) is considered as having no cost, however whilst it is accepted that this option calls for no capital outlay, doing nothing will not deliver the net benefit predicted for the previous two options, therefore the cost of doing nothing could be as high as £48.8m (option 1)

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

The issues regarding water supply are overstated, the current situation for firefighting water is that the water undertakers are signed up to the Water UK National Guidance Document on Water for Firefighting, despite this they are unable to guarantee the supply for firefighting to the flow requirements of this document. Where these requirements cannot be met the developer is supposed to provide a 45000 litre tank supply for firefighting. The developers take great pains to demonstrate that, whilst the water undertakers will not guarantee supply to the flows and quantity required, the day to day requirements for potable water for general household purposes are such that

at any given time the water supply to the development is adequate to meet the flow requirements for firefighting purposes.
Housing developments with units of detached or semidetached houses of not more than two floors should have a water supply capable of delivering a minimum of eight litres per second through any single hydrant. This equates to 480l/min, more than adequate for a BS: 9251 domestic standard sprinkler system which requires 109 l/min
Multi occupied housing developments with units of more than two floors should have a water supply capable of delivering a minimum of 20 to 35 litres per second through any single hydrant on the development. This equates to 2100l/min, more than adequate for a BS:9251 Residential standard sprinkler system which requires 210 l/min

096-17935 - Grwp Gwalia

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: Ffion Lanchbury & Gavin Howells (on behalf of Grŵp Gwalia Cyf.)

Organisation (if applicable): Grŵp Gwalia Cyf.

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes ☒
No ☐
Comments:

We feel that if that the Measure is to be adopted the most pragmatic approach would be to ensure compliance via the Building Regulation system.

Given the scale of the proposed Measure, we feel that application and assessment via the Building Regulations process would ensure the capture and compliance of all new and converted residential accommodation.

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes ☐
No ☒
Comments:

Whilst we understand the rationale for Government intervention (noting that the majority of deaths and injuries from fire in Wales occur in the home) there is no certainty that deaths and injuries would be lessened if sprinkler systems were a requirement in new and converted residences as set out in paragraphs 28 and 31.

We do appreciate that this Measure is aimed at “residences” only and the Committee’s remit does not extend to other residential premises (hospitals, prisons, hostels etc.). To that end, we feel that the list of properties in

paragraph 28 & 31 is broadly correct to ensure the Measure has the intended effect.

However, because of the lack of economic justification for the proposals – specifically the conclusions of BRE's cost benefit analysis, which indicates that fitting sprinklers into the new and converted residential properties is not cost effective – we cannot agree with the proposed list of residences in paragraphs 28 & 31.

We also feel that increasing the regulatory burden on house builders and providers of the accommodation in paragraphs 28 & 31 will lead to distorting effects between the housing markets in England and Wales. We do not feel that introducing this Measure in isolation would have any significant benefit for the Welsh economy and indeed, at the current time, would do substantial damage to house building activity, jobs and employment in construction.

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes ☒
No ☐
Comments:

If it is to be implemented for domestic occupancies, then the guidance should refer to BS 9251 as the main standard.

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes ☒
No ☐
Comments:

We feel that it will be important that any guidance has the flexibility to adapt to new technologies and advancements in fire suppression systems.

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes ☐
No ☒
Comments:

We feel that if there is no regulation of maintenance, the systems are likely to become redundant in properties which are owned by private individuals.

Landlords and RSL's, like ourselves would be obliged to maintain the systems to a satisfactory standard. However, the increase in resources required would be considerable and the legal and technical implications are not fully understood (where systems are installed in areas of low water pressure; when there are power cuts and the system fails to operate etc.) It is worth noting that there may also be a requirement for water storage tanks, which may have structural implications. This may result in additional development costs and will require servicing, leading to service charge implications for the tenants. We are trying to provide affordable housing in an increasingly complex and expensive industry.

Social housing tenants often opt to change their electricity meter system to a token meter, which may run out if the tenant does not 'top-up' the meter. Where sprinkler systems are in existence, there should be no risk of power failure. Fuel poverty presents an issue, which the Domestic Fire Safety Measure 2011 consultation documentation and evidence fails to address.

Although – where properties are in management – there will be legal implications for non-compliance and non-maintenance of sprinkler systems, without regulation there will be no guarantee that private homeowners will maintain sprinkler systems to the standard expected by this Measure. Is there an expectation that insurance companies would compel private owners to maintain their sprinkler systems? Regardless, there is a very real possibility that the proposed Measure could be an expensive gamble for Wales.

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes ☒
No ☐
Comments:

We feel that this is essential in terms of explaining to the homeowners why they need to maintain their system and for the avoidance of redundant systems. In addition, if other fire related regulations are relaxed because of the reliance on a sprinkler system which is redundant, this may result in further fatalities and / or injuries.

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes ☒
No ☐
Comments:

We agree that there should be sufficient lead-in times before changes to Building Regulations take effect. This would allow businesses to plan and adapt to the proposed changes.

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[21] remain relevant given the proposals covered by the new legislation?

Yes ☐
No ☐
Comments:

We do not feel that our organisation is in the position to comment given that we do not partake in the design, supply, installation and commissioning of fire suppression equipment.

We do however feel that it would be reasonable to assume that given the scale of the new legislation, the National Occupational Standard covering Mechanical Fire Protection should be reviewed to ensure compliance with the regulations.

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes ☐
No ☐

Comments:

As response to question 8.

We do however feel that increased training would be a requirement of any new legislation.

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes ☐
No ☒
Comments:

- We feel that the proposed changes to the approved documents are too developed given the limited evidence and lack of focus on establishing whether deaths and injuries are reflective of the age and typology of the housing stock.

- Policy Option 1 (Preferred Option) fails to recognise that in order to eliminate all fatalities (which is the intention of Policy Option 1), then

[21] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

sprinkler installation would be a requirement in **all** housing stock – this includes existing stock as well as new build residential accommodation.

This seems somewhat of a contradiction as Policy Option 1 refers to installing sprinkler system **only** in new residential buildings.

- We do not support the amendments given the research the BRE's Economic Assessment research which clearly demonstrates that the proposals are not cost effective.

- We cannot support a proposal which could potentially have adverse effect of development viability and house building activity in Wales especially given the current economic climate and the effect this proposal could have on job opportunities, apprenticeships, supply chains, SMEs, homelessness, communities etc.

- We do not feel that all private householders would maintain their sprinkler systems in adequate condition, especially if there are financial implications in doing so.

- We feel that Policy Option 2 – which the BRE deemed to be cost effective - is a more sensible and pragmatic approach, but are disappointed that this is not explored further by the impact assessment

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes ☐
No ☒
Comments:

We feel the cost benefit analysis adequately recognises the 'costs' of the proposed regulations, however, it is assumed that 35.5 ± 3.8 deaths could be saved over the whole life of the sprinkler systems in the 'benefits' calculation and that this estimation does not differentiate between older and newer stock.

Therefore, we cannot agree that the cost benefit analysis is a reasonable estimation of costs and benefits of the proposed regulations.

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes ☐
No ☒
Comments:

We feel it overstates the benefits of such a policy and understates the impact on the wider construction community in Wales, on private households (particularly those on low incomes), on Dŵr Cymru and their statutory powers.

It is interesting to note that Dŵr Cymru consider the supply to be non-domestic under the Water Industry Act definition and so cannot be responsible for or guarantee supply. Indeed, there is some research from Dŵr Cymru on their networks which suggests that 53% of the network at some point in a 24 hour cycle falls below the requisite pressure for fire suppression systems.

The context of wider water industry obligations and responsibilities will need to assist and facilitate effective implementation and to assist in cost effectiveness.

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

We feel the key issue is that the WG are introducing a measure only to new housing – whereas the majority of deaths that have been caused by house fires in Wales are almost certainly in older properties. Although there is no direct research to support this theory, we feel it is critical that this is explored further before regulations with such an impact are adopted.

The priority should be funding and educating existing homeowners to install smoke detection etc.

097-17935 - Fire Brigades Union in Wales

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: Cerith Griffiths (Mr)

Organisation (if applicable): Fire Brigades Union

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes X
No ☐
Comments:

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes X
No ☐
Comments:

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes X
No ☐
Comments:

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes X
No ☐
Comments:

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes X
No ☐
Comments:

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes X
No ☐
Comments:

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes X
No ☐
Comments:

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[22] remain relevant given the proposals covered by the new legislation?

Yes X
No ☐
Comments:

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes X
No ☐

[22] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

Comments:

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes X
No ☐
Comments:

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes X
No ☐
Comments:

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes X
No ☐
Comments:

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

100-17935 - Plumis (Alan Hart)

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: Dr Alan Hart

Organisation (if applicable): Plumis Ltd.

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes ☐
No ☒
Comments: It does make sense to use the existing frameworks to enforce the measure. I believe the measure should simply be regarded as increasing the range of new properties in which fire suppression is required. However it probably should also be treated as an update to the LACoRS guide as I will explain below.

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes ☐
No ☒
Comments: From what was said in the consultation meeting in Cardiff, the measure is inherently nonsensical, adding negative value to Wales and not improving standards in the places where the most improvement is needed. However the measure has been passed. I would therefore strongly encourage you to implement with a light touch in ordinary homes, setting a very long timetable for compliance, and more aggressively in social housing and other high risk settings. For example you could regard all new HMOs as new residences, or even the renewal of an HMO licence as creating a new residence. This would require the Measure to stretch outside Approved Document B however.

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes ☐
No ☒
Comments: BS9251 is one very specific approach to fire suppression. While I would not have an objection to citing 9251 as a reference standard, by citing only BS EN 12845 and BS 9251 as the two ways to comply with the measure, you go against the whole spirit of the European project. BS 9251 is not a harmonised European standard and BS EN 12845 is not a harmonised standard for this application. It's essential if the negative NPV of the Measure is to be mitigated that we have efficient and effective competition. The business of installing fire suppression should not be not handed to a single lobby group (BAFSA and its members) but instead must be opened up to all appropriate suppliers and all technologies. No doubt most installations will still follow BS 9251. For those that do not, this does leave a larger piece of the decision to local building control officers, but that is the system that we already have (Approved Document B section 0.18/0.16). That allows a case by case assessment supported by LABC Registered Details, test data, fire engineered solutions and so on.

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes ☒
No ☐
Comments: This is a very misleading question. Although I agree that the guidance should retain flexibility, the question really overlooks all the proprietary innovative solutions on the market (Automist, Ultraguard, Naturvent to name but three). British Standards is a very slow process, often taking ten or more years for a new standard to be adopted following the creation of the product it standardises. There is no need to change the test for "what makes good fire suppression" from what it is today - a requirement for the local officer to ensure that it has been properly tested for the application - to a very limited set of slow-changing standards. To do so bans innovation from this part of the Welsh fire safety market.

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes ☒
No ☐
Comments:

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes ☒
No ☐
Comments: This seems a sensible move but you would do better to focus on driving awareness that failing to service a suppression system might impact your insurance, and in the case of landlords could lead to imprisonment.

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes ☒
No ☐
Comments:

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[23] remain relevant given the proposals covered by the new legislation?

Yes ☒
No ☐
Comments:

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes ☒
No ☐
Comments:

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes ☐
No ☒
Comments: As discussed above, the proposed changes really lock in BS 9251 and perhaps BS EN 12845 as the only ways the measure can be met.

[23] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

Even if this was not the intent, for most housebuilders it will be the result - local authority BC officers generally act in a risk-averse way. The change disregards the advances of CE Marking and Construction Products Regulation wherein we have moved to accepting products in a consistent way across Europe, not imposed local standards rigidly. It also reduces the discretion of the Building Control Officer accepting alternative solutions. Finally, there's no reason to frame the change like this. ADB already has a system for accepting new technologies through the presentation of supporting evidence - a system which is well supported through the LABC Registered Details scheme. The Measure should simply expand the range of properties in which suppression is required, not try to change the way that new technologies may be adopted to comply with Building Regs.

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes ☒
No ☐
Comments: I agree with the analysis in that the costs outweigh the benefits.

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes ☒
No ☐
Comments:

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

In summary, the implementation panel has overlooked (a) the way that the Building Control system pushes decision power to the local level, (b) that there is a framework (Registered Details et al.) to support those local decisions, and (c) that there are products developed and being developed to work within this framework. Your current approach is unnecessarily heavy-handed and risks banning these products in Wales. Our product, Automist, could have some very good applications where urban properties are subdivided and it is not always practical to fit sprinklers (e.g. no room for a tank). As currently proposed you would make it very hard for Building Control to accept Automist for such an application.

101-17935 - South Wales Fire and Rescue Service (Leigh Jones)

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation
Response Form

Your name: Leigh Jones

Organisation (South Wales Fire and Rescue Service):

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes ☒
No ☐
Comments: This method is the most appropriate for implementing the Measure. Without an amendment to Building Regulations which clearly stipulates (by way of a new unambiguous regulation) the requirement to fit automatic water suppression systems in those premises covered by the Measure, it would be possible for applicants to argue that they could demonstrate equivalent levels of safety by other means thus negating the requirement to install sprinklers, thereby circumventing the intent of the Measure.

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes ☒
No ☐
Comments: The list of residences appears appropriate; however more detailed guidance is required regarding the difference between a boarding house and a hotel. Some hotels now house guests on a relatively long term basis, such as families awaiting social housing, providing them with full board. If a premises of this nature , was either newly built or extended and called a hotel by the developers there would be no requirement for sprinklers, if on the other hand in a true reflection of its intended purpose it was called a boarding house sprinklers would be required.

Whilst distinctions such as this may appear pedantic, it is precisely this level of detail which the regulating authorities will have to deal with; more detailed guidance regarding the exact nature of the categories of residence, either in the Measure or as supporting guidance would be essential

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes ☒
No ☐
Comments: For the majority of premises caught by the Measure BS9251 would provide an appropriate standard, whilst for some larger premises BS12845 may be more suitable.

The potential for installers and designers to derogate from the standard should not be excluded; strict adherence to BS9251 would require that only parts conforming to BS9252 would be acceptable. At the moment there are no sprinkler heads available which conform to this standard. The designer should retain the option to use alternative components, as is the case presently, as long as those components are tested to an accepted standard such as UL 1626 where there is a data sheet available which supports their suitability for the application in question. Similarly where a designer chooses to utilise another standard such as NFPA13d for the entire system this should be permissible within the Measure as long as the proposed standard has been robustly tested and found appropriate for the application in which it is to be used.

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes ☒
No ☐
Comments: Whilst some degree of standardisation is necessary over-prescription could have the effect of stifling innovation.
Whatever standard is utilised, the suppression system must be suitable for the application it is being proposed for and must be designed and installed to a recognised standard. In house testing alone should not be acceptable.
Any system installed must be true to the intent of the Measure, providing protection in all those areas of the building caught by the Measure. It should not be sufficient for a designer to propose a system which would protect only the access rooms and escape routes, due cognisance must be given to the fact that 53% of all fire fatalities occur in the room of origin and it is within these rooms that the Measure will have its greatest impact.

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes ☐
No ☒

Comments: For those premises and parts of premises which fall under the Regulatory Reform (Fire Safety) Order 2005 the maintenance of suppression systems can and should be enforced under the Order. Article 17 of the Order states:

17.—*(1) Where necessary in order to safeguard the safety of relevant persons the responsible person must ensure that the premises and any facilities, equipment and devices provided in respect of the premises under this Order or, subject to paragraph (6), under any other enactment, including any enactment repealed or revoked by this Order, are subject to a suitable system of maintenance and are maintained in an efficient state, in efficient working order and in good repair.*

This is of particular relevance where design freedoms are allowed on the basis of sprinkler provision which would have the effect of reducing the passive structural elements of fire safety such as fire doors, compartmentation and fire resistance.

For those premises and parts of premises which do not fall within the order then, whilst not ideal, the proposal not to regulate is acceptable due to the difficulties which would be experienced in trying to regulate the maintenance of the systems.
If systems are mains fed the maintenance requirements are minimal: the heads and pipework require no maintenance, the only part of the system which requires regular maintenance is the pump which is fitted to tank and pump systems, or the jockey pump if fitted. For this reason mains fed systems should be fitted wherever possible.
The problems of lack of maintenance will reduce over time as market forces come into operation. Currently many householders use service providers to maintain their heating systems and many of these service providers such as gas undertakers have branched out into other areas of house maintenance; it is not unreasonable to assume that these companies will also tender for sprinkler maintenance as it is relatively straightforward.
Additionally some companies are now offering a self starting pump set which turns over weekly or monthly, this would reduce the likelihood of system failure.

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes ☒
No ☐
Comments: This is an essential element of the Measure; householders are largely unaware of the operation and limitations of a sprinkler system. An easily understood guide will reduce the incidence of fire suppression systems being rendered ineffective by over painting of sprinkler heads, placing large items of furniture within close proximity to heads/ nozzles etc.

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes ☐
No ☒
Comments: Whilst it is accepted that the impact for builders, particularly S.M.E.s may be considerable, and that a transitional period of 6 months would in some degree offset the impact, this leaves considerable scope for developers to make Building Regulations applications for large numbers of buildings which could significantly reduce the number of sprinklered buildings in the first three years of the Measure.
The benefits to the building industry from the proposed approach will largely be available to the larger concerns only as they have the financial capacity to acquire land, planning permission and Building Regulations approval, it will be of limited value to S.M.E.s in the industry as they will lack the capacity to forecast and pre-plan to the same degree.
The design implications of the new standard have to a large extent been addressed by existing guidance, system design will be of approved standards which are already available, the design freedoms, or 'trade-offs' are largely those which currently exist within the approved documents and British Standards.
The building industry has had almost two years to address training and supply chain issues, as discussed above the specifications need no development as they are existing.
There is a significant impact for the Fire and Rescue Services in Wales. Each of these Services will be consulted on all Building Regulation applications within their service area for premises which are caught by the Regulatory Reform (Fire Safety) Order 2005. If they are subjected to a large number of large scale developments intended for the following three years this will significantly stretch the available legislative fire safety resources.

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[24] remain relevant given the proposals covered by the new legislation?

Yes ☒
No ☐
Comments:

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes ☒
No ☐
Comments: The issue of fitness for purpose will not be affected by the implementation of the regulations;
The capacity however may not be sufficient. Consideration should be given to an approvals process for any companies seeking to enter the training provision market in order to reduce any possible reduction in training delivery standards.

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes ☒ With reservations
No ☐
Comments: Whilst the majority of the changes are appropriate, paragraph 18.13 in Approved Document B volume 2 – Buildings Other than Dwellinghouses implies that a sprinkler system installed to BS: 9251 would be appropriate for use when designing a mechanical smoke extraction system for a basement, BS12845 allows a designer to choose a nominal fire size of mW based on assumed maximum area of operation, this is not possible under BS9251 and an assumption of a 5mW fire may be incorrect.
Additionally the issue of duration of supply could have serious implications for firefighters, firefighting in basements is arduous and dangerous, and therefore time must be taken before affecting entry to ensure that all health and safety protocols are being observed. A residential system installed under BS: 9251 has a guaranteed supply of 30 minutes and this is likely to be sufficient to control the fire until internal firefighting operations can be commenced. However a domestic system under 9251 has a guaranteed supply of only 10 minutes and the system would have ceased to operate before firefighting operations can be commenced; this substantially increases the risk to firefighters. Mechanical ventilation of basements should be acceptable only where a BS: 12845, or equivalent, system is provided.

[24] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes ☐
No ☒
Comments:
The cost benefit analysis for Wales follows the same methodology as the 3 previous analyses, these analyses use the 'green book' estimated cost which is based on the Department of Transports cost of a death figure. This figure does not take into account the cost of fire service attendance; this seems incongruous when assessing the cost of fire. It is reasonable to assert that the inclusion of these not insubstantial costs would have a positive effect on the cost benefit analyses, possibly bringing further premises into the cost neutral or cost beneficial outcomes of the analysis.
The costs for tanks and mains connections, even taking into account the sensitivity analyses, are overstated. Many new large scale developments will benefit greatly from economies of scale.

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes ☒With reservations
No ☐
Comments: Option 3 (Do nothing) is considered as having no cost, however whilst it is accepted that this option calls for no capital outlay, doing nothing will not deliver the net benefit predicted for the previous two options, therefore the cost of doing nothing could be as high as £48.8m (option 1)

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

The issues regarding water supply are overstated, the current situation for firefighting water is that the water undertakers are signed up to the Water UK National Guidance Document on Water for Firefighting, despite this they are unable to guarantee the supply for firefighting to the flow requirements of this document. Where these requirements cannot be met the developer is supposed to provide a 45000 litre tank supply for firefighting. The developers take great pains to demonstrate that, whilst the water undertakers will not guarantee supply to the flows and quantity required, the day to day

requirements for potable water for general household purposes are such that at any given time the water supply to the development is adequate to meet the flow requirements for firefighting purposes.

Housing developments with units of detached or semidetached houses of not more than two floors should have a water supply capable of delivering a minimum of eight litres per second through any single hydrant. This equates to 480l/min, more than adequate for a BS: 9251 domestic standard sprinkler system which requires 109 l/min

Multi occupied housing developments with units of more than two floors should have a water supply capable of delivering a minimum of 20 to 35 litres per second through any single hydrant on the development. This equates to 2100l/min, more than adequate for a BS:9251 Residential standard sprinkler system which requires 210 l/min

102-17935 - Celtech Consultancy Ltd

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: Wes Evans

Organisation (if applicable): Celtech Consultancy Ltd

email / telephone number:

Your address:

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes ☐
No ☒
Comments:

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes ☐
No ☒
Comments: Should only apply to RRO

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes ☐
No ☒
Comments:

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes ☒
No ☐
Comments:

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes ☒
No ☐
Comments:

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes ☐
No ☒
Comments:

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes ☐
No ☒
Comments:

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[25] remain relevant given the proposals covered by the new legislation?

Yes ☐
No ☒
Comments:

[25] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes ☐
No ☒
Comments:

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes ☐
No ☒
Comments:

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes ☐
No ☒
Comments:

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes ☐
No ☒
Comments:

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

We believe this is unsustainable. Do the statistics relate to incidents where buildings comply with current regs or are they outdated?

104-17935 - Oxfordshire County Council Fire and Rescue Service

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: **Kevan Kerr**

Organisation (if applicable): **Oxfordshire County Council Fire and Rescue Service**

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes ☐✓
No ☐

Comments: OFRS fully support this positive approach to reducing fire deaths, reducing the risks to fire fighters, and in providing sustainable buildings.

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes ☐✓
No ☐

Comments: OFRS suggest that further consideration be given to requiring AFSS protection to car parks under blocks of flats given the external fire spread from floor to floor seen in some recent fires in buildings of this type. The assumption that the fire load in car parks is well defined and that there is a low probability of fire spread from one storey to another as stated in ADB Volume 2 Section 11 appears out dated given the fire load presented by modern cars. External fire spread from one storey to another has proved to be a significant risk to occupants of flats even when there is sprinkler protection within the flats. This was notable in the fire at the sprinkler protected Bristol care home in 2006 where a fire in an unsprinklered basement car park spread up the exterior of the building putting residents at risk.

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes ☐✓
No ☐
Comments:

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes ☐✓
No ☐
Comments:

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes ☐
No ☐✓
Comments: Whilst it is acknowledged that this is in line with other fire safety systems that are recommended in ADB, OFRS have concerns regarding the maintenance of sprinkler systems in buildings where there will be no requirement to maintain the systems under the RR(FS)O. It is of particular concern where boundary distances could be reduced, or where the distance from dwellings to the fire service vehicle access point could be increased, due to the inclusion of sprinklers. OFRS suggest that further consideration to be given to exercising functions under Section 2 of the Building Act to prescribe obligations for the inspection and maintenance of fire suppression systems upon owners and occupiers of residential premises to which the measure applies.

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes ☐
No ☐✓
Comments: Not as the only method of ensuring systems are maintained, see question 5.

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes ☐✓
No ☐
Comments:

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[26] remain relevant given the proposals covered by the new legislation?

Yes ☐✓
No ☐
Comments: Third party certification schemes will continue to play a key role in ensuring that an appropriate standard of workmanship is being provided.

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes ☐✓
No ☐
Comments:

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes ☐✓
No ☐
Comments:

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

[26] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes ☐✓
No ☐
Comments:

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes ☐✓
No ☐
Comments:

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

105-17935 - South Wales Fire and Rescue Service (David Burton)

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

David G. Burton

South Wales Fire and Rescue Service

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes
No
Comments: This method is the most appropriate for implementing the Measure. Without an amendment to Building Regulations which clearly stipulates (by way of a new unambiguous regulation) the requirement to fit automatic water suppression systems in those premises covered by the Measure, it would be possible for applicants to argue that they could demonstrate equivalent levels of safety by other means thus negating the requirement to install sprinklers, thereby circumventing the intent of the Measure.

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes
No
Comments: The list of residences appears appropriate; however more detailed guidance is required regarding the difference between a boarding house and a hotel. Some hotels now house guests on a relatively long term basis, such as families awaiting social housing, providing them with full board. If a premises of this nature , was either newly built or extended and called a hotel by the developers there would be no requirement for sprinklers, if on the other hand in a true reflection of its intended purpose it was called a boarding house sprinklers would be required.

Whilst distinctions such as this may appear pedantic, it is precisely this level of detail which the regulating authorities will have to deal with; more detailed guidance regarding the exact nature of the categories of residence, either in the Measure or as supporting guidance would be essential

Chapter 3 Design, testing and installation of residential fire suppression systems

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Yes
No
Comments: For the majority of premises caught by the Measure BS9251 would provide an appropriate standard, whilst for some larger premises BS12845 may be more suitable.

The potential for installers and designers to derogate from the standard should not be excluded; strict adherence to BS9251 would require that only parts conforming to BS9252 would be acceptable. At the moment there are no sprinkler heads available which conform to this standard. The designer should retain the option to use alternative components, as is the case presently, as long as those components are tested to an accepted standard such as UL 1626 where there is a data sheet available which supports their suitability for the application in question. Similarly where a designer chooses to utilise another standard such as NFPA13d for the entire system this should be permissible within the Measure as long as the proposed standard has been robustly tested and found appropriate for the application in which it is to be used.

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes
No
Comments: Whilst some degree of standardisation is necessary over-prescription could have the effect of stifling innovation.
Whatever standard is utilised, the suppression system must be suitable for the application it is being proposed for and must be designed and installed to a recognised standard. In house testing alone should not be acceptable.
Any system installed must be true to the intent of the Measure, providing protection in all those areas of the building caught by the Measure. It should not be sufficient for a designer to propose a system which would protect only the access rooms and escape routes, due cognisance must be given to the fact that 53% of all fire fatalities occur in the room of origin and it is within these rooms that the Measure will have its greatest impact.

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes
No

Comments: For those premises and parts of premises which fall under the Regulatory Reform (Fire Safety) Order 2005 the maintenance of suppression systems can and should be enforced under the Order. Article 17 of the Order states:

17.—*(1) Where necessary in order to safeguard the safety of relevant persons the responsible person must ensure that the premises and any facilities, equipment and devices provided in respect of the premises under this Order or, subject to paragraph (6), under any other enactment, including any enactment repealed or revoked by this Order, are subject to a suitable system of maintenance and are maintained in an efficient state, in efficient working order and in good repair.*

This is of particular relevance where design freedoms are allowed on the basis of sprinkler provision which would have the effect of reducing the passive structural elements of fire safety such as fire doors, compartmentation and fire resistance.

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The problems of lack of maintenance will reduce over time as market forces come into operation. Currently many householders use service providers to maintain their heating systems and many of these service providers such as gas undertakers have branched out into other areas of house maintenance; it is not unreasonable to assume that these companies will also tender for sprinkler maintenance as it is relatively straightforward.
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Yes
No
Comments: This is an essential element of the Measure; householders are largely unaware of the operation and limitations of a sprinkler system. An easily understood guide will reduce the incidence of fire suppression systems being rendered ineffective by over painting of sprinkler heads, placing large items of furniture within close proximity to heads/ nozzles etc.

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes
No
Comments: Whilst it is accepted that the impact for builders, particularly S.M.E.s may be considerable, and that a transitional period of 6 months would in some degree offset the impact, this leaves considerable scope for developers to make Building Regulations applications for large numbers of buildings which could significantly reduce the number of sprinklered buildings in the first three years of the Measure.
The benefits to the building industry from the proposed approach will largely be available to the larger concerns only as they have the financial capacity to acquire land, planning permission and Building Regulations approval, it will be of limited value to S.M.E.s in the industry as they will lack the capacity to forecast and pre-plan to the same degree.
The design implications of the new standard have to a large extent been addressed by existing guidance, system design will be of approved standards which are already available, the design freedoms, or 'trade-offs' are largely those which currently exist within the approved documents and British Standards.
The building industry has had almost two years to address training and supply chain issues, as discussed above the specifications need no development as they are existing.
There is a significant impact for the Fire and Rescue Services in Wales. Each of these Services will be consulted on all Building Regulation applications within their service area for premises which are caught by the Regulatory Reform (Fire Safety) Order 2005. If they are subjected to a large number of large scale developments intended for the following three years this will significantly stretch the available legislative fire safety resources.

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[1] remain relevant given the proposals covered by the new legislation?

Yes
No
Comments:

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes
No
Comments: The issue of fitness for purpose will not be affected by the implementation of the regulations;
The capacity however may not be sufficient. Consideration should be given to an approvals process for any companies seeking to enter the training provision market in order to reduce any possible reduction in training delivery standards.

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes With reservations
No
Comments: Whilst the majority of the changes are appropriate, paragraph 18.13 in Approved Document B volume 2 – Buildings Other than Dwellinghouses implies that a sprinkler system installed to BS: 9251 would be appropriate for use when designing a mechanical smoke extraction system for a basement, BS12845 allows a designer to choose a nominal fire size of mW based on assumed maximum area of operation, this is not possible under BS9251 and an assumption of a 5mW fire may be incorrect.
Additionally the issue of duration of supply could have serious implications for firefighters, firefighting in basements is arduous and dangerous, and therefore time must be taken before affecting entry to ensure that all health and safety protocols are being observed. A residential system installed under BS: 9251 has a guaranteed supply of 30 minutes and this is likely to be sufficient to control the fire until internal firefighting operations can be commenced. However a domestic system under 9251 has a guaranteed supply of only 10 minutes and the system would have ceased to operate before firefighting

operations can be commenced; this substantially increases the risk to firefighters. Mechanical ventilation of basements should be acceptable only where a BS: 12845, or equivalent, system is provided.

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes
No
Comments:
The cost benefit analysis for Wales follows the same methodology as the 3 previous analyses, these analyses use the 'green book' estimated cost which is based on the Department of Transports cost of a death figure. This figure does not take into account the cost of fire service attendance; this seems incongruous when assessing the cost of fire. It is reasonable to assert that the inclusion of these not insubstantial costs would have a positive effect on the cost benefit analyses, possibly bringing further premises into the cost neutral or cost beneficial outcomes of the analysis.
The costs for tanks and mains connections, even taking into account the sensitivity analyses, are overstated. Many new large scale developments will benefit greatly from economies of scale.

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes With reservations
No
Comments: Option 3 (Do nothing) is considered as having no cost, however whilst it is accepted that this option calls for no capital outlay, doing nothing will not deliver the net benefit predicted for the previous two options, therefore the cost of doing nothing could be as high as £48.8m (option 1)

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

The issues regarding water supply are overstated, the current situation for firefighting water is that the water undertakers are signed up to the Water UK National Guidance Document on Water for Firefighting, despite this they are

unable to guarantee the supply for firefighting to the flow requirements of this document. Where these requirements cannot be met the developer is supposed to provide a 45000 litre tank supply for firefighting. The developers take great pains to demonstrate that, whilst the water undertakers will not guarantee supply to the flows and quantity required, the day to day requirements for potable water for general household purposes are such that at any given time the water supply to the development is adequate to meet the flow requirements for firefighting purposes.
Housing developments with units of detached or semidetached houses of not more than two floors should have a water supply capable of delivering a minimum of eight litres per second through any single hydrant. This equates to 480l/min, more than adequate for a BS: 9251 domestic standard sprinkler system which requires 109 l/min
Multi occupied housing developments with units of more than two floors should have a water supply capable of delivering a minimum of 20 to 35 litres per second through any single hydrant on the development. This equates to 2100l/min, more than adequate for a BS:9251 Residential standard sprinkler system which requires 210 l/min

Regards/Cofion
Dave Burton
Watch Manager Fire Safety / Rheolwr Gwylfa Diogelwch Tan
South Wales Fire and Rescue Service / Gwasanaeth Tan ac Achub De Cymru

106-17935 - Plumis (William Makant)

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation
Response Form

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes

Comments:

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes

Comments:

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

No
Comments:
A standard does not mean it is the only means of achieving an end, it is a means that a solution has been present in the market for such a long time that competitor manufacturers have agreed on a narrow scope, to define the boundaries and performance of a category. A British Standard should not be interpreted as the only means to obtain a “quality seal" to demonstrate a product's performance and quality.
BS9251 goes into more detail than just setting a performance criteria for a suppression device, which is what this regulation should have focused on: “how should a suppression system perform to be applicable to homes in Wales?” BS9251 specifies how sprinkler systems are designed, installed and maintained, very specific. This means that there is no flexibility in the design of alternative suppression systems and therefore there is no room for

innovation to potentially reduce the total ownership cost to the home owner. This is in effect equivalent to a tender where the request is so narrow in scope that only a single supplier can fulfil it. This regulation should have simply set the requirement for suppression and in which ways this can be validated, which has to date, been responsibility of the Building Control Officer. Limiting domestic suppression to BS9251 is so bizarre that it could be compared to a proposal to ban the sale of electric cars because their efficiency cannot be measured using the standard MPG as fuel consumption because they don't use a liquid fuel.

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes
Comments:
A category of products only achieves a British Standard when they are very mature in a market, not when they have demonstrated the ability to perform as intended. Watermist systems have been used successfully by the maritime industry for over 30 years (which means they perform as intended) but still do not have a British Standard. This does not mean they are "immature", it is simply that there has not been demand for it in buildings and thus for the development of an over-prescriptive British Standard on how to go about specifying and installing one.

The only way this regulation can be kept flexible but responsible is through following the system which is already in place: third party validation of performance to the intended use.

Local Authority Building Control (LABC) have a procedure called Registered Details (and Registered Solutions) where a product that is not covered by a Standard is analysed by LABC and deemed acceptable for a specific intended application. This allows for the quick adoption of innovations by specifically stating the applications to which they are accepted while still going through a detailed scrutinisation process. LABC already has fire suppression systems which are not covered by BS9251 as Registered Solutions and are specific to certain applications, why should the adoption of fire suppression in Wales exclude this progressive approach by the main building approval body in the UK?

Both the US and the EU follow similar lines. In the US with the Watermist Standard NFPA 750 requiring the "Listing" of proposed systems by accredited testing laboratories (equivalent to UKAS). The EU is already following a similar route with the Constructions Products Regulation with the need for a Declaration of Performance with the involvement of a Notified Body.

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes

Comments:
It should not be mandated but there should be more analysis on the idea that insurers would require it to provide premium discounts as occurs in the US which can be up to 15%. Homeowners do not generally maintain these systems unless there is an external driver to do so (such as saving money) as demonstrated by the well known issue of disabled battery powered smoke alarms.

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes

Comments:
But this guide will be generally ignored the most of the population as is the maintenance of smoke alarms in homes.

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes

Comments:

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[27]
remain relevant given the proposals covered by the new legislation?

Yes

Comments:

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes

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27 The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

Comments:
However, following the previous statements, these should not be limited to BS systems. UKAS could also extend accreditation to systems which have LABC Registered Solution status.

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

No
Comments:
The proposed changes turn Approved Document B into an and document prescribing BS9251 and disregarding all advances made in the European Community regarding CE Marking, Construction Products Regulation and the accreditation by independent third party bodies of products not covered by a harmonised EN Standard. It in effect stiffens the market and does not necessarily improve regulation. It also excludes the role of the Building Control Officer in having the know-how to accept alternative solutions to meeting the same impact.

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes

Comments:

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes

Comments:

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:
This consultation has missed the opportunity to carry out a proper study in how to improve the fire safety in homes in Wales in the most effective way. Instead, the study has focused solely on sprinklers and has decided to progress despite the extremely negative NPV. What the study has

demonstrated is that it will take many decades until the complete house stock is protected by sprinklers and where the loss of life would be drastically reduced. Not only is it expensive but it is extremely long term, thus the NPV shown. Had the study looked into the cost-benefit of retrofitting interlinked smoke alarms throughout I am confident the number of lives saved every year would be higher and the cost would be lower, resulting potentially in a positive NPV. There is no point in carrying out a study of a problem with a single proposed solution and going ahead with this solution despite evidence that it is not worthwhile without looking at competing alternatives, it is not a good use of taxpayer money.

107-17935 - Cleveland Fire Brigade (Ian Hayton)

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: CFO Ian Hayton

Organisation (if applicable): Cleveland Fire Brigade

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes ☒
No ☐
Comments:

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes ☒
No ☐
Comments:

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes ☒
No ☐
Comments:

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes ☒
No ☐
Comments:

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes ☒
No ☐
Comments:

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes ☒
No ☐
Comments:

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes ☒
No ☐
Comments:

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[28] remain relevant given the proposals covered by the new legislation?

Yes ☒
No ☐
Comments:

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes ☒
No ☐

[28] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

Comments:

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes ☒
No ☐
Comments:

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes ☒
No ☐
Comments:

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes ☒
No ☐
Comments:

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

As Chief Fire Officer for Cleveland Fire Brigade I would like to congratulate the Welsh Government for seeking to implement this Measure.
It will literally be a life-saving addition to the new properties that fall within the scope of the Measure and I will work tirelessly to see this implemented throughout the UK.

108-17935 - Tyne and Wear Fire & Rescue Service (Ian Bell)

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: Ian Bell. Fire Safety Station Manager

Organisation (if applicable): Tyne and Wear Fire and Rescue Service

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes ☐✓

Comments: This seems to be a logical approach to allow alliance of the building types to the purpose groups set out in the Building Regulations.

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes ☐✓

Comments: the lists are self-explanatory providing clarity on the definition of residence and where the regulation should apply to.

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes ☐✓

Comments: BS 9251 would be the most preferred option, the current review should identify any weakness for improvement and build upon the strengths so should strengthen it as the preferred guidance to refer to, however, persons who are planning to install sprinklers should have the freedom to use BSEN 12845 as it is a recognised standard.

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes ☐✓

Comments: There should preferably be a reference to an 'equivalent standard' as the building may be designed and constructed to other acceptable standards such (e.g. the NFPA standard will be applied if the building is designed and constructed to an American standard). Acceptance of the standard for water mist systems if this comes out as a full British Standard should also be referenced; however, compliance with the current Building Regulations is paramount to ensure they meet legal requirements.

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

No ☐✓

Comments: systems that are fitted to protect the occupier and potentially others in the premises should have a minimum maintenance standard to ensure the system is in good efficient working order; suppression systems such as fire sprinklers could be fitted to enhance Firefighter safety so they must be maintained in a good efficient working order in these circumstances.

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes ☐✓

Comments: This would benefit landlords/management companies who pass on the burden of maintenance to the occupier, such as high rise residential blocks of flats. Guidance should be simple and easy to use for the occupier and provide guidance on ensuring the system will operate as intended e.g. awareness of the impact a painted/papered over concealed sprinkler head may have on the coverage when someone carries out decoration work in a flat is just one example. If owners are provided with relevant information, then the majority should be capable of ensuring their system remains operational. A benefits and myths section could also provide the occupier with general advice on sprinklers.

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes ☐✓

Comments: No further comments.

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[29] remain relevant given the proposals covered by the new legislation?

Yes ☐✓

Comments: The need for a recognised standard for competency and training to fit such systems is key to keeping the highly recognised benefits of sprinklers intact. Membership of a recognised accreditation scheme for passive systems could also benefit the Measure, such as the Fire Accreditation Scheme (FIRAS) where installers are individually assessed by FIRAS and lists are held on their website for confirmation of the accreditation.

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes ☐✓

Comments: It appears to meet the expected demands of the implementation of the Measure in Wales.

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes ☐✓

Comments: No comments.

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes ☐✓

[29] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

Comments: This is a reasonable estimation; however, the CFOA commissioned cost benefit analysis undertaken by BRE provides a much more considered and balanced report and should be included as evidence for this proposal.

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

No ☐✓

Comments: The Regulatory Impact Assessment does not consider the impact the Regulations will have on existing dwellings, and the take up of retrofit sprinklers as a consequence, once society becomes aware of the benefits as a potential result of growing evidence to support sprinklers in dwellings.

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:
The issue with providing a suitable water supply to dwellings to accommodate the fitting of sprinklers needs to be addressed in the Water Regulations by an amendment to classify water used by a sprinkler as 'water for fire-fighting'. This would negate the need for meters to be fitted on the majority of systems.

Is there going to be a means of measuring the fitting of sprinklers in Wales with periodic reports to inform others of the progression? Also the number of sprinkler stops and case studies to support the sprinkler campaign would be of benefit to Fire Services across England and Wales (Steve Mills of BAFSA collates sprinkler stops from Fire Services across the country but believe this should be monitored and reported on as evidence for the Wales Measure).

111-17935 - Aircrete Products Association Limited

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: Cliff Fudge

Organisation: Aircrete Products Association Ltd

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

☐ No ■

Comments:

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

☐ No ■

Comments:

Please note that the following responses to questions 3- 10 do not infer that we accept the overall proposals. The responses constitute comments only on the practicality of the implementation mechanisms in the event that the proposals move forward.

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes ■ ☐

Comments: .

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes ■ ☐
Comments:

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes ■
☐
Comments:

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes ■
☐
Comments:

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes ■☐
Comments:

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[30] remain relevant given the proposals covered by the new legislation?

☐
No ■
Comments:

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

[30] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

No ☐
Comments:

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

No ☐
Comments:

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

No ☐
Comments: .

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

No ☐
Comments:

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

112-17935 - South Wales Fire and Rescue Service (Don Freeman)

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation
Response Form

Your name: WM D Freeman

Organisation (South Wales Fire and Rescue Service):

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes ☒
No ☐
Comments: This method is the most appropriate for implementing the Measure. Without an amendment to Building Regulations which clearly stipulates (by way of a new unambiguous regulation) the requirement to fit automatic water suppression systems in those premises covered by the Measure, it would be possible for applicants to argue that they could demonstrate equivalent levels of safety by other means thus negating the requirement to install sprinklers, thereby circumventing the intent of the Measure.

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes ☒
No ☐
Comments: The list of residences appears appropriate; however more detailed guidance is required regarding the difference between a boarding house and a hotel. Some hotels now house guests on a relatively long term basis, such as families awaiting social housing, providing them with full board. If a premises of this nature , was either newly built or extended and called a hotel by the developers there would be no requirement for sprinklers, if on the other hand in a true reflection of its intended purpose it was called a boarding house sprinklers would be required.

Whilst distinctions such as this may appear pedantic, it is precisely this level of detail which the regulating authorities will have to deal with; more detailed guidance regarding the exact nature of the categories of residence, either in the Measure or as supporting guidance would be essential

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes ☒
No ☐
Comments: For the majority of premises caught by the Measure BS9251 would provide an appropriate standard, whilst for some larger premises BS12845 may be more suitable.

The potential for installers and designers to derogate from the standard should not be excluded; strict adherence to BS9251 would require that only parts conforming to BS9252 would be acceptable. At the moment there are no sprinkler heads available which conform to this standard. The designer should retain the option to use alternative components, as is the case presently, as long as those components are tested to an accepted standard such as UL 1626 where there is a data sheet available which supports their suitability for the application in question. Similarly where a designer chooses to utilise another standard such as NFPA13d for the entire system this should be permissible within the Measure as long as the proposed standard has been robustly tested and found appropriate for the application in which it is to be used.

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes ☒
No ☐
Comments: Whilst some degree of standardisation is necessary over-prescription could have the effect of stifling innovation.
Whatever standard is utilised, the suppression system must be suitable for the application it is being proposed for and must be designed and installed to a recognised standard. In house testing alone should not be acceptable.
Any system installed must be true to the intent of the Measure, providing protection in all those areas of the building caught by the Measure. It should not be sufficient for a designer to propose a system which would protect only the access rooms and escape routes, due cognisance must be given to the fact that 53% of all fire fatalities occur in the room of origin and it is within these rooms that the Measure will have its greatest impact.

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes ☐
No ☒

Comments: For those premises and parts of premises which fall under the Regulatory Reform (Fire Safety) Order 2005 the maintenance of suppression systems can and should be enforced under the Order. Article 17 of the Order states:

17.—*(1) Where necessary in order to safeguard the safety of relevant persons the responsible person must ensure that the premises and any facilities, equipment and devices provided in respect of the premises under this Order or, subject to paragraph (6), under any other enactment, including any enactment repealed or revoked by this Order, are subject to a suitable system of maintenance and are maintained in an efficient state, in efficient working order and in good repair.*

This is of particular relevance where design freedoms are allowed on the basis of sprinkler provision which would have the effect of reducing the passive structural elements of fire safety such as fire doors, compartmentation and fire resistance.

For those premises and parts of premises which do not fall within the order then, whilst not ideal, the proposal not to regulate is acceptable due to the difficulties which would be experienced in trying to regulate the maintenance of the systems.
If systems are mains fed the maintenance requirements are minimal: the heads and pipework require no maintenance, the only part of the system which requires regular maintenance is the pump which is fitted to tank and pump systems, or the jockey pump if fitted. For this reason mains fed systems should be fitted wherever possible.
The problems of lack of maintenance will reduce over time as market forces come into operation. Currently many householders use service providers to maintain their heating systems and many of these service providers such as gas undertakers have branched out into other areas of house maintenance; it is not unreasonable to assume that these companies will also tender for sprinkler maintenance as it is relatively straightforward.
Additionally some companies are now offering a self starting pump set which turns over weekly or monthly, this would reduce the likelihood of system failure.

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes ☒
No ☐
Comments: This is an essential element of the Measure; householders are largely unaware of the operation and limitations of a sprinkler system. An easily understood guide will reduce the incidence of fire suppression systems being rendered ineffective by over painting of sprinkler heads, placing large items of furniture within close proximity to heads/ nozzles etc.

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes ☐
No ☒
Comments: Whilst it is accepted that the impact for builders, particularly S.M.E.s may be considerable, and that a transitional period of 6 months would in some degree offset the impact, this leaves considerable scope for developers to make Building Regulations applications for large numbers of buildings which could significantly reduce the number of sprinklered buildings in the first three years of the Measure.
The benefits to the building industry from the proposed approach will largely be available to the larger concerns only as they have the financial capacity to acquire land, planning permission and Building Regulations approval, it will be of limited value to S.M.E.s in the industry as they will lack the capacity to forecast and pre-plan to the same degree.
The design implications of the new standard have to a large extent been addressed by existing guidance, system design will be of approved standards which are already available, the design freedoms, or 'trade-offs' are largely those which currently exist within the approved documents and British Standards.
The building industry has had almost two years to address training and supply chain issues, as discussed above the specifications need no development as they are existing.
There is a significant impact for the Fire and Rescue Services in Wales. Each of these Services will be consulted on all Building Regulation applications within their service area for premises which are caught by the Regulatory Reform (Fire Safety) Order 2005. If they are subjected to a large number of large scale developments intended for the following three years this will significantly stretch the available legislative fire safety resources.

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[31] remain relevant given the proposals covered by the new legislation?

Yes ☒
No ☐
Comments:

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes ☒
No ☐
Comments: The issue of fitness for purpose will not be affected by the implementation of the regulations;
The capacity however may not be sufficient. Consideration should be given to an approvals process for any companies seeking to enter the training provision market in order to reduce any possible reduction in training delivery standards.

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes ☒ With reservations
No ☐
Comments: Whilst the majority of the changes are appropriate, paragraph 18.13 in Approved Document B volume 2 – Buildings Other than Dwellinghouses implies that a sprinkler system installed to BS: 9251 would be appropriate for use when designing a mechanical smoke extraction system for a basement, BS12845 allows a designer to choose a nominal fire size of mW based on assumed maximum area of operation, this is not possible under BS9251 and an assumption of a 5mW fire may be incorrect.
Additionally the issue of duration of supply could have serious implications for firefighters, firefighting in basements is arduous and dangerous, and therefore time must be taken before affecting entry to ensure that all health and safety protocols are being observed. A residential system installed under BS: 9251 has a guaranteed supply of 30 minutes and this is likely to be sufficient to control the fire until internal firefighting operations can be commenced. However a domestic system under 9251 has a guaranteed supply of only 10 minutes and the system would have ceased to operate before firefighting operations can be commenced; this substantially increases the risk to firefighters. Mechanical ventilation of basements should be acceptable only where a BS: 12845, or equivalent, system is provided.

[31] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes ☐
No ☒
Comments:
The cost benefit analysis for Wales follows the same methodology as the 3 previous analyses, these analyses use the 'green book' estimated cost which is based on the Department of Transports cost of a death figure. This figure does not take into account the cost of fire service attendance; this seems incongruous when assessing the cost of fire. It is reasonable to assert that the inclusion of these not insubstantial costs would have a positive effect on the cost benefit analyses, possibly bringing further premises into the cost neutral or cost beneficial outcomes of the analysis.
The costs for tanks and mains connections, even taking into account the sensitivity analyses, are overstated. Many new large scale developments will benefit greatly from economies of scale.

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes ☒With reservations
No ☐
Comments: Option 3 (Do nothing) is considered as having no cost, however whilst it is accepted that this option calls for no capital outlay, doing nothing will not deliver the net benefit predicted for the previous two options, therefore the cost of doing nothing could be as high as £48.8m (option 1)

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

The issues regarding water supply are overstated, the current situation for firefighting water is that the water undertakers are signed up to the Water UK National Guidance Document on Water for Firefighting, despite this they are unable to guarantee the supply for firefighting to the flow requirements of this document. Where these requirements cannot be met the developer is supposed to provide a 45000 litre tank supply for firefighting. The developers take great pains to demonstrate that, whilst the water undertakers will not guarantee supply to the flows and quantity required, the day to day

requirements for potable water for general household purposes are such that at any given time the water supply to the development is adequate to meet the flow requirements for firefighting purposes.

Housing developments with units of detached or semidetached houses of not more than two floors should have a water supply capable of delivering a minimum of eight litres per second through any single hydrant. This equates to 480l/min, more than adequate for a BS: 9251 domestic standard sprinkler system which requires 109 l/min

Multi occupied housing developments with units of more than two floors should have a water supply capable of delivering a minimum of 20 to 35 litres per second through any single hydrant on the development. This equates to 2100l/min, more than adequate for a BS:9251 Residential standard sprinkler system which requires 210 l/min

113-17935 - Redrow Homes

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: Nigel Smith

Organisation (if applicable): Redrow Homes Ltd

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes ☐
No ■
Comments: Please see detailed comments in the appended covering letter.

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes ☐
No ■

Comments: Please see detailed comments in the appended covering letter.

As an alternative to a blanket application of the Measure currently proposed we suggest a more realistic approach mirroring the Scottish regulations and confirmed by the BRE analysis, limited to care homes, halls/dormitories, new blocks of flats, blocks of sheltered flats (not including sheltered houses) and “traditional” HMOs.

This would permit results to be monitored over a suitable period and the extent of the Measure could be reviewed in due course. Time would be provided for revision of fire statistics data collection methods to better inform the review and future decisions.
If this approach was adopted BRE's Cost Benefit Analysis indicates Present Value Total Costs would reduce from -£239.3m to -£14.2m; Overall Net Present Value would improve from -£190.5m to £3.8m and the Present Value cost/statistical life saved would reduce to £1.6m in line with the DOT "willingness to pay" figure of £1.62m.

Please note that the following responses to questions 3- 10 do not infer that we accept the overall proposals. The responses constitute comments only on the practicality of the implementation mechanisms proposed.

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes ■
No □
Comments: .

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes ■
No □
Comments: Failure to maintain a flexible approach would deter innovation and prevent adoption of new systems which may provide a superior, more practical and more cost effective solution.

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes ■
No ☐
Comments: Enforcement of maintenance through the regulation in private properties is not practical: - 1)There would be a significant additional administrative cost of policing and registration.
2) Potential new home buyers may see this as an ongoing maintenance burden which would further disincentive purchase of a new home.
3) Fair, meaningful and proportional penalties for non-compliance would be difficult to set and would involve further administrative cost to enforce.

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes ■
No ☐
Comments: This should in any case form part of the customer guidance on operation of building services in the new property.

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes ■
No ☐
Comments: The commencement and transitional arrangements should be retained in the format currently employed: ie: 6 months between making the regulation and its introduction, together with standard transitional arrangements:-

The requirements do not apply to sites where:

- work on site commenced prior to the date the regulation came into effect, or
- an Initial Notice has been given or full-plans building notice deposited with the local authority prior to effective date , provided work commences on site prior to one calendar year later.

where the following work constitutes site commencement:

- Excavation for a foundation.
- Installation of a length of drain or a manhole.
- Formation of a raft foundation.
- Pile installation.

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[32] remain relevant given the proposals covered by the new legislation?

Yes ☐
No ■
Comments: Para 153 – NOS for Mechanical Fire Protection. We are not familiar with this document however having browsed it, it seems to generally be consistent with requirements, however SFS MFP-1 Glossary defines thus

: - "*mechanical fire protection solution: **a non-electrical** device used for fire protection such as, sprinklers; gas systems; water mist and powder; foamsystems; chemical fire extinguishers; dry and wet risers (fire mains; fire hose reels"*

Does this definition apply only to mains fed systems?Does NOS apply where electrical pumps and controls are required for a pump and tank installation or booster pumps are required? Are these not deemed to be electrical?

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes ☐
No ■
Comments: We do not wish to introduce additional trades to site and *if* the regulations are introduced as proposed, we would prefer that our existing plumbing sub-contractors achieved accreditation. We therefore question whether there is sufficient training resource to enable the workforce to engage and gain qualification to avoid disruption of build programmes.

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes ■
No □
Comments:

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes □
No ■
Comments: Please see detailed comments in accompanying letter.

BRE Cost Benefit Analysis
Executive Summary

Page 2 and Ministerial Forward Chapter 2 Cost Benefit Analysis, Page 7.
In discussing smoke alarm penetration there is no differentiation made between hard wired and battery powered installations. How has the figure of 85% of households in Wales (currently provided with a smoke alarm) been deduced?
What proportion of the 85% (if that is accurate) are hard wired as opposed to battery powered?

Page 6 What data has been used to quantify existing levels of working smoke alarm provision?

Page 13 Description of Project.
Data- The fire statistics are insufficiently detailed to draw out the age of properties involved in fires and therefore determine the impact of hard wired smoke alarms.
Without this baseline property age data it will be impossible to measure the effectiveness or otherwise of the proposed regulatory change.
New build volumes over the next 10 years will only add approximately 4.6% to the existing housing stock according to the Welsh Government's own estimates. The impact of the regulation over the total housing stock in Wales is therefore insignificant.

Assumptions
3.2.1 Reliability is also a function of the water supply method. Worsened reliability is likely from pump and tank systems. An unintended consequence of the solutions offered is that the option presenting least liability risk for the developer will also deliver the least reliable outcome.

3.2.3 Again, Welsh statistics are insufficiently detailed to accurately determine real effectiveness of sprinklers and cannot adequately inform the indirect estimation method employed.
3.2.4 What percentage of sprinklers in the Thames Gateway schemes were mains fed and is this relevant to the capability of mains supplies in Wales?
3.2.6 Assumption of 100% maintenance is wildly optimistic. (the very low proportion of domestic gas boilers which are regularly maintained provides proof).
Table 3 Total number of dwellings in wales is estimated at 1.38m. Total number of new homes built in Wales over the next ten years is likely to be < 60,000 which equates to 4.3% of the total stock at ten years. The impact of introducing the new regulations into new build statistically cannot be significant.
P26 Trends – We would not disagree with regard to the trend for open plan homes. We do not agree that the apartment sector of the market is growing. This sector was one of the worst affected by the financial crisis and downturn and Redrow's build mix includes significantly less apartments for the foreseeable future.

Monetised costs and benefits

Table 6 Costs received from BAS/FSA cannot be considered as unbiased data. Why were no developers/builders with experience canvassed? In modern new build, tanks are rarely located in loft space.

Loft tank installation: -

- Assumes that no structural improvement is necessary for the 1.5 tonnes of water to be stored.
- Overlooks the increasing depth of insulation required to meet Part L which precludes access provision to tanks from attic hatches.
- Overlooks "room-in-the-roof " housetypes with no attic.

Tanks will therefore need to be external in most cases, probably buried and incorporating frost protection for pipework.
Costs in Table 6 do not include for any of these requirements.

4.6 Water Supply Costs – It has not been confirmed whether water service companies will apply additional charges for flow/pressure monitoring and testing in association with connection requests or whether kpis will have to be

met by water companies in response to applications to prevent construction delays.
Water service companies have confirmed that existing domestic meters are not suitable for mains sprinkler systems as they reduce flow. There is no discussion regarding the need for development of appropriate meters and no indication of cost for these or for commercial meters which would be necessary in the interim.
Sensitivities 8a and 8b – Comments are as made previously - Where does the statistic that 85% of homes have smoke alarms come from?
What proportion of these are hard wired? To examine the argument concerning the impact of the introduction of hard wired smoke alarms in 1992 it is necessary to understand what proportion of homes are hard wired now, their age and how many incidences of serious fire relate to them.

Page 44 The Cost Benefit Analysis conclusions are self explanatory and demonstrate the case is not proven for introduction of the new regulations.
Appendices A-D These provide justification for statistical manipulation and assumptions employed in handling cost and performance data which do not replace hard data.
Appendix E1 and E2 – There is no mention of new type meter costs or additional cost charged for flow/pressure measurement by the Water Companies.

G7 – What have rates in Scottsdale , Arizona got to do with Wales?

G9 – Shared responsibility may work where there is a management company involved ie: flats or housing association. **Shared responsibility in private ownership runs foul of legal covenants, responsibility for electrical supply, maintenance, etc. and is not practical . It cannot therefore be assumed that a 65% reduction can be taken.**

Appendix H The data does not differentiate between hard wired and battery operated alarms.

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes ☐
No ■
Comments: Please see detailed comments in accompanying letter.

Impact assessment – Cost and Benefits of Each Option - **page 9 Benefits** – based on the previous statistics of 17 deaths in 10 years and assuming no improvement over 50 years, 85 deaths could be expected. If new build contributes 60000 homes over 10 years, which represents an additional 4.3% of the total housing stock, then surely the best improvement that can be gained is 4.3% x 17= 0.731 deaths, **assuming all fatal fires are in new homes only.**
Even if new build output was calculated for 50 years at 300,000 units, this would still only represent 17% of the total stock, so proportionately, new build would account for 14.45 deaths, not 35.5 as claimed in the IA, and again this assumes all fire related deaths fall in those 17% of homes constructed in the period.

Page 15
There is no reference to WG housing policy aspirations as set out in the recent White Paper.
Contractor Certfication Note that the certification cost of £2250 /annum will undoubtedly be passed onto the client (developer).
Page 21 – The risk of contamination in stored water has been minimised in the consultation document, however, the risk remains as noted by the water company response.

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

Please see detailed comments in accompanying letter.

Chapter 3– Installation of fire sprinkler systems
Page 15 – **para 53**. There is no evidence available from the water service companies with respect to sufficiency of mains pressure and flows across Wales and pressures have been generally reduced to cut down leakage It is therefore not logical to draw the conclusion that “In many instances tank and pumps would not be necessary and the water supply could be provided by town mains”.

Page 16 –para 59. Welsh Water and Dee Valley Water have indicated that a purpose designed meter needs to be developed to meet the requirements for domestic premises fitted with sprinklers. Work has yet to commence on this.

In the interim it was suggested that a commercial sized meter will need to be installed . No cost data has been made available as part of the consultation and no allowance has been made within the overall cost assumptions. (WW indicated that there could be a susbstantial cost).

Page 22- para 97. The paragraph concedes that comparison of the risks associated with the sufficiency of mains pressure and flows for fire fighting are not directly comparable with the risk for the designer in deciding on the type of installation. There is a risk of litigation being brought by customers or groups of customers against the designer in the event of failure of a mains fed installation which is compliant with the regulations, whereas responsibility for efficient operation of a tank and pump system would rely entirely with the householder. However, risk of failure of tank and pump systems through lack of maintenance is perceived to be a greater risk than reduced pressure in the local network (para116). There is a disconnect here in that the least risk route for the designer results in the worst risk solution.

Page 24 – Para 110. The water service companies have not confirmed whether there will be additional cost associated with the necessary pressure and flow checks .

ADDITIONAL
Proposed Domestic Fire Safety (Wales) Measure April 2013

Dear Sirs,

I would like to take this opportunity to submit a response to the above consultation, on behalf of Redrow Homes Ltd.
I reiterate the statement made in the letter which accompanied our response to the initial Explanatory Memorandum, in that we are wholeheartedly committed to the provision of homes for our customers which provide a high level of safety in all aspects, not least of which is fire safety. I should also like to add that we are most mindful of the personal aspects and wider social sensitivities posed by fire related death and injury and indeed the risks which fire fighters are subjected to in the course of carrying out their valuable duties.
Nevertheless, we feel strongly that the manner in which this Measure has been progressed and imposed is totally unacceptable and we consider the benefits of the Measure as drafted, to have been grossly misrepresented to the Welsh Government.
We also stress that these proposals cannot be considered in isolation and must be viewed within the context of the cumulative impact of other aspirational Welsh regulatory policies, the expanding plethora of other demands made upon housing development through planning and associated technical matters and with realistic regard to the constraints posed by the current economic climate which has radically changed since this initiative was set in motion.
The Welsh Government must recognise the effect of the increasingly onerous and unsustainable cost burden being placed upon the industry which further worsens development viability already unsustainably weak in many areas of Wales. Failure to prioritise its ambitions risks disincentivising investment in the Welsh house building industry and constricting delivery of

much needed new homes at a time when it is recognised that stimulus of this industry is key to recovery from recession.

Evidence Base

We concede that efforts have been made in the current consultation to take account of some of the practical issues previously raised. The fact remains that the "evidence" supporting introduction of the Measure is primarily assumption based and subject to statistical manipulation in the absence of hard data relating to the UK as a whole or specifically Wales.

The proposal in 2012 was based on available data from the previous 10 years which showed that on average 17 deaths and 503 injuries per year resulted from fires in residential properties in Wales, but the available data is insufficiently defined to determine the age of the properties involved in these incidents and the relationship between new build homes incorporating hard-wired smoke alarms and the fire event statistics therefore remains undetermined. In any case since new build volumes over the next 10 years will only add approximately 4-5% to the existing housing stock according to the Welsh Government's own estimates, it is difficult to see how the Measure can deliver **significantly** against its objectives as reported to the National Assembly for Wales Legislation Committee ie:

- Help reduce or possibly eradicate fire deaths in Wales
- Help reduce fire injuries in Wales
- Improve the safety of fire-fighters; and provide much needed additional protection against the effects of fire, particularly for vulnerable groups.

Indeed, without vastly improved data quality the success or otherwise of the amended regulation cannot be measured going forward

The Measure.

Of equal concern is the apparent disregard of any adverse comment or data throughout progression of the Measure to date and evidenced again by the comments made in this consultation supporting regulation change, in spite of the conclusions drawn in the independent Cost Benefit Analysis(CBA) undertaken by BRE on behalf of the Welsh Government, or the concurrent work undertaken on cumulative land value impact by Davis Langdon associated with the Part L proposals.

We note that the National Assembly for Wales Finance Committee acknowledged in its report of November 2010 that the measure "will inevitably lead to an increase in construction costs" and remarkably went on to state that "there is no evidence that they will be seen as a significant burden on house buyers or have significant impact on the housing market." This strongly suggests that the anxieties expressed by the house building industry regarding cumulative regulatory cost were either not presented as evidence to the Committee, or completely ignored.

The Draft Impact Assessment (DIA)(page 14) makes reference to consideration of the cumulative regulatory cost associated with the Part L consultation and reports the estimated land value reduction resulting from introduction of sprinklers, at 3-4%, but then fails to mention the figures for combined impact, ranging from 9%-18% from table 3.7A **2012 consultation on changes to the Building Regulations Part L in Wales (Conservation of Fuel and Power)**, which incidentally assumes nil affordable housing contribution.

We contend that these figures are in any event underestimated for reasons which we set out in our Part L consultation response and as detailed in our accompanying submission for this consultation. Importantly, there is no reference to the delivery of 7,500 new affordable homes as set out in the Government's White Paper, " Homes for Wales – A White Paper for Better Lives and Communities, published in May 2012. Furthermore, the recent EU decision to impose import tariffs on Chinese photo voltaic products will undoubtedly add cost to Part L compliance, worsening the projected development viability yet further.

The rather naïve conclusion drawn in the DIA that viability could be improved by reducing developers' profit, or negotiating a reduced land price demonstrates complete lack of understanding of the mechanisms of the industry or the realities of the current market and fails to recognise that there is no obligation on a land owner to sell.

The essence of true consultation is a process of dialogue between stakeholders which should inform decisions about new proposals and policies. Disappointingly, in this case it seems that the decision to implement the Measure was taken before consultation and despite any information or reasoning which questioned the benefit.

Water Supply and Design Liability

The water companies have made clear their position regarding guaranteed flows and pressures and their preference for non-mains systems, yet the consultation assumes that mains connections will be possible in 90% of cases in Wales. This figure has been provided by the British Automatic Fire Sprinkler Association based on very limited experience in England rather than from the water service companies operating in Wales. As such this can hardly be considered as unbiased or robust information.

Taking into consideration the water companies' stance, we are concerned that design decisions taken where water mains flows and pressures are marginally adequate for mains fire suppression systems, as described in paragraph 93 of the consultation, may leave the "designer" liable in the event of a fatal fire if sprinklers failed to operate fully because of low flows or pressures, whereas the water companies would have no liability whatsoever.

Putting aside all other practical issues, to avoid the risk of litigation and/or considerable reputational damage we would have little choice but to adopt tank and pump systems with the associated incumbent costs.

It seems unreasonable and unacceptable for a building regulation to expose companies to this sort of risk and we would welcome a statement from the Welsh Government clarifying the situation with regard to liability. As it stands, the least risk route for the designer results in the worst risk solution.

Costs

We have made the WG aware that where a tank fed system is necessary, loft tanks cannot be practically incorporated into any Redrow house designs. Positioning of tanks would be problematic within our roof truss configurations, structural improvements would be necessary and in any case provision of

maintenance access to tanks is impractical given the progressively increasing depth of loft insulation required for Part L compliance. We also have a small number of “room in the roof” designs which have no usable attic space. Tanks will therefore need to be external and buried for aesthetic/ marketing reasons.
Our estimated cost for a 3 bed detached home for this type of system installation is **£3743** excluding profit and overheads (sprinkler installation **£2268**, tank and associated works £**1475**). This excludes any additional charges the water service companies may make for pressure/flow testing; costs arising from delayed construction commencement resulting from slow response to requests for flow/pressure information from the water service companies who have no service KPI s imposed on them in this respect, or any unforeseen mains laying requirements that we are not, as yet, aware of.

Cumulative Cost
We stress again our concern about the damaging cumulative impact of costs on the future delivery of new homes in Wales.
Our current estimated cumulative on-cost for the same 3 bed detached home (1013 sq ft) for sprinklers and Part L (40% improvement) is **£4,200 + £3,743** = **£8,246** which is **£9,720** above the cost of current English regulation as summarised in the table below (it should be noted that the current build cost for the same housetype is already **£1474** above English build costs).
To this must be added as yet indeterminate costs associated with the introduction of S42 of the Flood and Water Management Act, potential costs arising from the introduction of associated SuDs standards and unquantified fees associated with the administration of Site Waste Management Plans.

Possible Changes to Welsh Part L - Estimated cost difference to current Welsh standards for Warwick design			
25% Improvement		**40% Improvement**	
Alternative 25%	Elemental 25%	Alternative 40%	Elemental 40%
317.5mm Cavity	362.5mm Cavity	317.5mm Cavity	362.5mm Cavity
Partial	Partial	Partial	Partial
£2,450	**£3,553**	**£4,200**	**£4,503**
Estimated cost difference to current English Part L 2010 Building Regulations			
£3,924	**£5,027**	**£5,674**	**£5,977**

Alternatives

We understand from discussions with Welsh Government officials and recent meetings between the Minister and senior Redrow Board members that the Measure sadly appears to be a “fait accompli”. This is very disappointing and we trust that future initiatives to increase regulatory standards are dealt with in a considerably more transparent manner.
We urge WG to very seriously reconsider the priorities of the regulatory measures currently on the table, which were envisaged in very different market circumstances some years ago and to consider an approach which more suits the present macro and micro economic climate.
Aspirational targets are commendable but policy setting should also remain flexible if it is to be implementable and successful. Inflexibility and the resultant pressure on development viability will without doubt influence future investment decisions in Wales, particularly when regulatory cost remains significantly less across the border in England.

If , as we have been told, the Measure must be implemented, as an alternative to a blanket application of the Measure currently proposed we suggest a more realistic approach mirroring the Scottish regulations and confirmed by the BRE analysis, limited to care homes, halls/dormitories, new blocks of flats, blocks of sheltered flats (not including sheltered houses) and “traditional” HMOs.
This would permit results to be monitored over a suitable period and the extent of the Measure could be reviewed in due course. Time would be provided for revision of fire statistics data collection methods to better inform the review and future decisions.
If this approach was adopted BRE’s Cost Benefit Analysis indicates Present Value Total Costs would reduce from -£239.3m to -£14.2m; Overall Net Present Value would improve from -£190.5m to £3.8m and the Present Value cost/statistical life saved would reduce to £1.6m in line with the DOT “willingness to pay” figure of £1.62m.

Yours Faithfully

N.C.J Smith
Redrow Homes Ltd
June 2013

115-17935 - Modern Masonry Alliance

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: **Mike Leonard**

Organisation (if applicable)**: Modern Masonry Alliance**

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes ☐
No ■
Comments: We do not believe the Measure should go forward in its current form

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes ☐
No ■

Comments: The measure should not apply to low level dwellings but should apply to multi- occupancy buildings.

For the avoidance of doubt we oppose this Measure as it will cause major damage to the Welsh Housing Market which will restrict economic growth and will result in major job losses.

My answers to questions 3 to 10 assume that our views are ignored and this damaging Measure is implemented in April 2014

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes ■
No ☐
Comments:

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes ■
No ☐
Comments: Allowing a flexible .approach makes sense

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes ■
No ☐
Comments: Whilst regular maintenance is vital there is no president for an enforced maintenance programme in owner occupied dwellings so this is a major issue which will result in some systems failing.

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes ■
No ☐
Comments: A simple to follow customer guide is sensible.

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes ■

No ☐
Comments: In addition to the accepted 6 month lead in

The requirement should not apply to sites where:

- Where any work on site commenced prior to the date the regulation came into effect, or
- an Initial Notice has been given or full-plans building notice deposited with the local authority prior to effective date, provided work commences on site prior to one calendar year later.

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[33] remain relevant given the proposals covered by the new legislation?

Yes ☐
No ■

Not clear that this will cover all situations. Where mains water pressure is the complexity and cost of external tanks and electric pumps will need to be considered.

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes ☐
No ■
Comments: Existing plumbing and electrical sub-contractors used by house builders will have to be trained to carry out this work.

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes ☐
No ■
Comments:

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

[33] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes ☐
No ■
Comments: The assumptions made are not realistic. This Measure will significantly reduce the numbers of new homes built in Wales which completely changes the picture.

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes ☐
No ■
Comments: The RIA provides irrefutable evidence that applying his Measure to low level domestic housing is not cost effective. To ignore thus is to undermine the principals of fairness. This measure should not be applied to low level housing

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

This Measure, if implemented in low level housing, will do very little to save lives. The effect on jobs and growth will be severe. Development viability is often marginal in Wales and the massive costs associated with this Measure will dramatically reduce the level of development in Wales. This will affect the livelihoods of Manufactures of building materials, Merchants and Construction workers. In addition thousands of much needed homes will not be built.

This is a disproportionate and inappropriate Measure and in respect of low level housing the RIA proves it is not viable to proceed.

117-17935 - North Wales Fire and Rescue Service (Paul Jenkinson)

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: Paul Jenkinson

Organisation (if applicable): North Wales Fire and Rescue Service

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes *☐
No ☐
Comments: this appears to be a logical way of bringing in the measure as all new premises will need to comply with building regulations. If however the measure is only included in approved document B what would happen in situations where buildings are designed to over codes of practice where sprinklers are not required. Approved inspectors have used engineering solutions and calculations to avoid installation of sprinklers that are already required in ADB much to the disappointment of the fire and rescue service.

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes *☐
No ☐
Comments: Some grey areas may exist when premises undergone a major refit but remain the same purpose group so would they have to be sprinklered.

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes *☐
No ☐
Comments: this is currently the main standard for residential systems but some premises will require larger system due to the nature of the proposed building so it important to encourage the training and use of third party accreditation by system installers as some will install system that are not fit for purpose if not adequately trained and knowledgeable of the requirements of sprinkler systems.

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes *☐
No ☐
Comments: as long as they are suitable for the use to which they are put and we do not allow use of draft standards. It is likely that a number of fire suppression systems will become available with appropriate standards attached but it will important to make the sprinkler requirement absolute for the purpose groups irrespective of the design methodology used for the fire safety within the building.

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes *☐
No ☐
Comments: very difficult to legislate for maintenance regimes in what may be private properties but education will be important to ensure that systems are serviced regularly, that sufficient numbers of qualified installers / servicers are available and that the servicers are trained and qualified in sprinkler systems.

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes *☐
No ☐
Comments: vital or systems will not get serviced. It will be important to explain how householders can identify a suitable qualified servicer / installer through the use of independent schemes of certification and accreditation.

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes *☐
No ☐
Comments: this is inline with other changes to building regulations.

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[34] remain relevant given the proposals covered by the new legislation?

Yes *☐
No ☐
Comments: The NOS are quite lengthy and not many centres provide training but there are some third party accreditation schemes for the installation and servicing of sprinklers. What guidance will be available on the selection of suitable installer?

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes ☐
No *☐
Comments: more places will need to offer training courses for the development of sufficient installers and maintenance people. It is likely that many plumbing companies will want to get involved who are not currently qualified to install sprinkler systems so there will be a need t o actively promote the training and the importance of effective third party accreditation schemes.

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes *☐
No ☐
Comments:

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes *☐

[34] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

No ☐
Comments: Irrespective of the cost benefit analysis this measure will save lives in the long term.

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes *☐
No ☐
Comments:

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

119-17935 - Hampshire Fire and Rescue Service (Stewart Adamson)

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: Group Manager Stewart Adamson

Organisation (if applicable): Hampshire Fire and Rescue Authority (HFRA)

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes ☒
No ☐
Comments:

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes ☐
No ☒
Comments: Hampshire Fire and Rescue Authority have considered sprinklers in some detail and have subsequently produced a statement highlighting the HFRA position. This position focusses on a risk based methodology.

HFRA considers some residential buildings to be of high risk due to the layout and construction or the occupants within. Contained within the HFRA position are tall buildings, care homes, timber framed buildings, and dwellings where vulnerable people reside.

HFRA considers the risk of death and serious injury, and losses to the economy in formulating it's position.

HFRA do not believe there is sufficient evidence to enforce a blanket coverage to all residential buildings with sprinklers. HFRA are convinced a focussed approach targeting those premises at greatest risk will deliver maximum benefit in a cost effective manner.

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes ☒
No ☐
Comments:

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes ☒
No ☐
Comments: HFRA fully support a flexible approach to the use of fire protection systems and welcome the inclusion of third party certification within the proposals.

HFRA consider that flexibility is a necessity within the proposal as BS 9251 has some anomalies which have been referenced.

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes ☒
No ☐
Comments: HFRA believe that any further regulation would not be achievable.

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes ☒
No ☐
Comments: The term "householder" should be considered in the widest context as there are potentially many stakeholders in residential premises in the rented and local authority sector. Education will need to incorporate all equally.

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes ☒

No ☐
Comments:

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[35] remain relevant given the proposals covered by the new legislation?

Yes ☒
No ☐
Comments: HFRA support the need to have trained personnel to install systems. HFRA feel issues with future maintenance of systems puts great emphasis on ensuring systems are installed to the highest standard.

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes ☒
No ☐
Comments: The need to cover all geographic areas is contained within the proposal. HFRA believe that access to training is key to ensuring that sufficient competition is available to stabilise prices.

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes ☒
No ☐
Comments:

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes ☒
No ☐
Comments: HFRA have considered BRE studies such as the recent CFOA commissioned report BRE 264227. This evidence has assisted HFRA in determining the position it holds with regards categories of premises suitably cost effective for the installation of sprinklers.

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[35] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes ☒
No ☐
Comments:

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

120-17935 - South Wales Fire and Rescue Service (Des Morris)

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation
Response Form

Your name: Des Mason

Organisation (South Wales Fire and Rescue Service):

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes ☒
No ☐
Comments: This method is the most appropriate for implementing the Measure. Without an amendment to Building Regulations which clearly stipulates (by way of a new unambiguous regulation) the requirement to fit automatic water suppression systems in those premises covered by the Measure, it would be possible for applicants to argue that they could demonstrate equivalent levels of safety by other means thus negating the requirement to install sprinklers, thereby circumventing the intent of the Measure.

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes ☒
No ☐
Comments: The list of residences appears appropriate; however more detailed guidance is required regarding the difference between a boarding house and a hotel. Some hotels now house guests on a relatively long term basis, such as families awaiting social housing, providing them with full board. If a premises of this nature , was either newly built or extended and called a hotel by the developers there would be no requirement for sprinklers, if on the other hand in a true reflection of its intended purpose it was called a boarding house sprinklers would be required.

Whilst distinctions such as this may appear pedantic, it is precisely this level of detail which the regulating authorities will have to deal with; more detailed guidance regarding the exact nature of the categories of residence, either in the Measure or as supporting guidance would be essential

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes ☒
No ☐
Comments: For the majority of premises caught by the Measure BS9251 would provide an appropriate standard, whilst for some larger premises BS12845 may be more suitable.

The potential for installers and designers to derogate from the standard should not be excluded; strict adherence to BS9251 would require that only parts conforming to BS9252 would be acceptable. At the moment there are no sprinkler heads available which conform to this standard. The designer should retain the option to use alternative components, as is the case presently, as long as those components are tested to an accepted standard such as UL 1626 where there is a data sheet available which supports their suitability for the application in question. Similarly where a designer chooses to utilise another standard such as NFPA13d for the entire system this should be permissible within the Measure as long as the proposed standard has been robustly tested and found appropriate for the application in which it is to be used.

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes ☒
No ☐
Comments: Whilst some degree of standardisation is necessary over-prescription could have the effect of stifling innovation.
Whatever standard is utilised, the suppression system must be suitable for the application it is being proposed for and must be designed and installed to a recognised standard. In house testing alone should not be acceptable.
Any system installed must be true to the intent of the Measure, providing protection in all those areas of the building caught by the Measure. It should not be sufficient for a designer to propose a system which would protect only the access rooms and escape routes, due cognisance must be given to the fact that 53% of all fire fatalities occur in the room of origin and it is within these rooms that the Measure will have its greatest impact.

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes ☐
No ☒

Comments: For those premises and parts of premises which fall under the Regulatory Reform (Fire Safety) Order 2005 the maintenance of suppression systems can and should be enforced under the Order. Article 17 of the Order states:

17.—*(1) Where necessary in order to safeguard the safety of relevant persons the responsible person must ensure that the premises and any facilities, equipment and devices provided in respect of the premises under this Order or, subject to paragraph (6), under any other enactment, including any enactment repealed or revoked by this Order, are subject to a suitable system of maintenance and are maintained in an efficient state, in efficient working order and in good repair.*

This is of particular relevance where design freedoms are allowed on the basis of sprinkler provision which would have the effect of reducing the passive structural elements of fire safety such as fire doors, compartmentation and fire resistance.

For those premises and parts of premises which do not fall within the order then, whilst not ideal, the proposal not to regulate is acceptable due to the difficulties which would be experienced in trying to regulate the maintenance of the systems.
If systems are mains fed the maintenance requirements are minimal: the heads and pipework require no maintenance, the only part of the system which requires regular maintenance is the pump which is fitted to tank and pump systems, or the jockey pump if fitted. For this reason mains fed systems should be fitted wherever possible.
The problems of lack of maintenance will reduce over time as market forces come into operation. Currently many householders use service providers to maintain their heating systems and many of these service providers such as gas undertakers have branched out into other areas of house maintenance; it is not unreasonable to assume that these companies will also tender for sprinkler maintenance as it is relatively straightforward.
Additionally some companies are now offering a self starting pump set which turns over weekly or monthly, this would reduce the likelihood of system failure.

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes ☒
No ☐
Comments: This is an essential element of the Measure; householders are largely unaware of the operation and limitations of a sprinkler system. An easily understood guide will reduce the incidence of fire suppression systems being rendered ineffective by over painting of sprinkler heads, placing large items of furniture within close proximity to heads/ nozzles etc.

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes ☐
No ☒
Comments: Whilst it is accepted that the impact for builders, particularly S.M.E.s may be considerable, and that a transitional period of 6 months would in some degree offset the impact, this leaves considerable scope for developers to make Building Regulations applications for large numbers of buildings which could significantly reduce the number of sprinklered buildings in the first three years of the Measure.
The benefits to the building industry from the proposed approach will largely be available to the larger concerns only as they have the financial capacity to acquire land, planning permission and Building Regulations approval, it will be of limited value to S.M.E.s in the industry as they will lack the capacity to forecast and pre-plan to the same degree.
The design implications of the new standard have to a large extent been addressed by existing guidance, system design will be of approved standards which are already available, the design freedoms, or 'trade-offs' are largely those which currently exist within the approved documents and British Standards.
The building industry has had almost two years to address training and supply chain issues, as discussed above the specifications need no development as they are existing.
There is a significant impact for the Fire and Rescue Services in Wales. Each of these Services will be consulted on all Building Regulation applications within their service area for premises which are caught by the Regulatory Reform (Fire Safety) Order 2005. If they are subjected to a large number of large scale developments intended for the following three years this will significantly stretch the available legislative fire safety resources.

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[36] remain relevant given the proposals covered by the new legislation?

Yes ☒
No ☐
Comments:

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes ☒
No ☐
Comments: The issue of fitness for purpose will not be affected by the implementation of the regulations;
The capacity however may not be sufficient. Consideration should be given to an approvals process for any companies seeking to enter the training provision market in order to reduce any possible reduction in training delivery standards.

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes ☒ With reservations
No ☐
Comments: Whilst the majority of the changes are appropriate, paragraph 18.13 in Approved Document B volume 2 – Buildings Other than Dwellinghouses implies that a sprinkler system installed to BS: 9251 would be appropriate for use when designing a mechanical smoke extraction system for a basement, BS12845 allows a designer to choose a nominal fire size of mW based on assumed maximum area of operation, this is not possible under BS9251 and an assumption of a 5mW fire may be incorrect.
Additionally the issue of duration of supply could have serious implications for firefighters, firefighting in basements is arduous and dangerous, and therefore time must be taken before affecting entry to ensure that all health and safety protocols are being observed. A residential system installed under BS: 9251 has a guaranteed supply of 30 minutes and this is likely to be sufficient to control the fire until internal firefighting operations can be commenced. However a domestic system under 9251 has a guaranteed supply of only 10 minutes and the system would have ceased to operate before firefighting operations can be commenced; this substantially increases the risk to firefighters. Mechanical ventilation of basements should be acceptable only where a BS: 12845, or equivalent, system is provided.

[36] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes ☐
No ☒
Comments:
The cost benefit analysis for Wales follows the same methodology as the 3 previous analyses, these analyses use the 'green book' estimated cost which is based on the Department of Transports cost of a death figure. This figure does not take into account the cost of fire service attendance; this seems incongruous when assessing the cost of fire. It is reasonable to assert that the inclusion of these not insubstantial costs would have a positive effect on the cost benefit analyses, possibly bringing further premises into the cost neutral or cost beneficial outcomes of the analysis.
The costs for tanks and mains connections, even taking into account the sensitivity analyses, are overstated. Many new large scale developments will benefit greatly from economies of scale.

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes ☒With reservations
No ☐
Comments: Option 3 (Do nothing) is considered as having no cost, however whilst it is accepted that this option calls for no capital outlay, doing nothing will not deliver the net benefit predicted for the previous two options, therefore the cost of doing nothing could be as high as £48.8m (option 1)

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

The issues regarding water supply are overstated, the current situation for firefighting water is that the water undertakers are signed up to the Water UK National Guidance Document on Water for Firefighting, despite this they are unable to guarantee the supply for firefighting to the flow requirements of this document. Where these requirements cannot be met the developer is supposed to provide a 45000 litre tank supply for firefighting. The developers take great pains to demonstrate that, whilst the water undertakers will not guarantee supply to the flows and quantity required, the day to day requirements for potable water for general household purposes are such that

at any given time the water supply to the development is adequate to meet the flow requirements for firefighting purposes.
Housing developments with units of detached or semidetached houses of not more than two floors should have a water supply capable of delivering a minimum of eight litres per second through any single hydrant. This equates to 480l/min, more than adequate for a BS: 9251 domestic standard sprinkler system which requires 109 l/min
Multi occupied housing developments with units of more than two floors should have a water supply capable of delivering a minimum of 20 to 35 litres per second through any single hydrant on the development. This equates to 2100l/min, more than adequate for a BS:9251 Residential standard sprinkler system which requires 210 l/min

122-17935 - Armstrong Priestley Ltd (Peter Armstrong)

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: Peter Armstrong

Organisation (if applicable): Armstrong Priestley Ltd

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes ☒
No ☐
Comments:

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes ☒
No ☐
Comments:

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes ☒
No ☐
Comments:

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes ☒
No ☐
Comments:

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes ☒
No ☐
Comments:

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes ☒
No ☐
Comments:

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes ☒
No ☐
Comments:

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[37] remain relevant given the proposals covered by the new legislation?

Yes ☒
No ☐
Comments:

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes ☒
No ☐

[37] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

Comments:

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes ☒
No ☐
Comments:

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes ☒
No ☐
Comments:

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes ☒
No ☐
Comments:

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

123-17935 - Karen Taylor

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: Mrs K Taylor

Organisation (if applicable):

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes ☒
No ☐
Comments:

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes ☒
No ☐
Comments:

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes ☒
No ☐
Comments:

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes ☒
No ☐
Comments:

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes ☒
No ☐
Comments:

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes ☒
No ☐
Comments:

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes ☒
No ☐
Comments:

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[38] remain relevant given the proposals covered by the new legislation?

Yes ☒
No ☐
Comments:

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes ☒
No ☐

[38] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

Comments:

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes ☒
No ☐
Comments:

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes ☒
No ☐
Comments:

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes ☒
No ☐
Comments:

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

124-17935 - Tai Clwyd Housing Association comment

Having discussed the matter with my Director I am now in a position to forward to you a corporate view on behalf of my employer – Cymdeithas Tai Clwyd.

Whilst preserving life and property is paramount - and indeed we would accept additional fire suppression in the amendment to the now devolved building regulations – we do not accept that fire sprinklers are the way forward for the following reasons:

- Completion of new build properties in Wales are at an all time low and adding this requirement - and the associated costs - will not exactly stimulate the market. One must remember that a vast number of affordable dwellings come through to housing associations through S106 agreements and therefore if the larger developers decide not to develop then it may well decrease the number of affordable units coming forward.
- There are a number of initiatives over the border to encourage first time buyers into the market – not available in wales – and these are the very people that the developers need. In Wales there are no such initiatives and nothing to stimulate the volume builders. The smaller more expensive developments will still go ahead however these are NOT the bread and butter of social housing.
- There is the question of hygiene – stagnant water will lead to bacterial build up (legionella) – if a head activated this may lead to problems?
- Installing of sprinkler systems have not been proved to save lives – property yes - but not lives.
- One death is one death too many - however most deaths caused by fires occur in houses of multiple occupation or flats – older stock not new stock – and with the smoke detectors etc faulty.
- Clearly the mains is unable to supply the pressure required - and although I believe there has been some dialogue the results have not been published
- This leads one to believe that the sprinklers will need to be serviced via header tanks – this will have structural implications – a sprinkler system needs a cube of water and a cube of water weighs a ton – and this will have go to into the roof space and therefore all roof structures will need to be designed to carry this additional load. Tanks in back gardens with pumps etc will not be feasible – we are now in a climate of extremes and not sure how one would protect from freezing – consider the rear garden of a social house (40 sq m) – shed, slabbed area, clothes line, water butt, cube of water plus say 300mm insulation all around – will there by any space left for our tenants to enjoy?
- The industry's main suppliers do not share WG enthusiasm and – in residential terms – the technology simply is not there and unless there is a huge demand then no manufacturer is going to invest in developing a head that works off low pressure mains.
- Insurance issues – linked to the above if a sprinkler is activated for some reason then a cube of water will be released – albeit in misted

form – and cost of repair because of water damage will far exceed cost of repair by any fire

- It seems that some institutions which most people would perceive to be at a higher risk – prisons, hostels etc would be excempt?

WG Officers thorough research and subsequent findings , well presented at recent workshop - clearly show that there is no cost benefit in any shape or form in taking this proposal forward.

You are most welcome to challenge any of the above points before they are presented to WG.

Kindest regards

R Bryn Davies

Rheolwr Datblygu

Development Manage

www.taiclwyd.com

125-17935 - Persimmon Homes West Wales

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: **Andy Baker-Edwards**

Organisation (if applicable): **Persimmon Homes West Wales**

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

No.

Comments:
This is a limited focus policy which ignores consequential impact for the whole of Wales. Copious evidence has been submitted by the HBF and House builders to show that the cost effects of the implementation will massively affect viability of new build homes resulting in a drop in supply and thousands of job losses across Wales.

Ministers should note that the economic impact is real. We have already written to nine Local Authorities in Wales notifying them that we have withdrawn investment for new projects in all or part of their area as it is now unviable to develop there. If this measure is enforced on all new build housing these no go areas will increase and significantly decrease supply of new homes and the thousands of jobs that go with it. The impact could be the equivalent of losing TATA steel from Wales to put it into perspective.

The Assembly's own advisers have advised Ministers that the proposed changes are not sensible on cost grounds and we are strongly of the opinion that there is no robust evidence that imposing sprinklers on new-build housing will have a material affect on death and injury statistics.

If significantly reducing death and injury from fire in homes is the real objective then mandatory fitting of hard wired smoke detectors in all existing homes would clearly make a far greater impact than sprinklers in new homes.

We would also question why this particular fatality area and industry sector has been targeted. According to evidence from the National Audit Office, in

2009, there were 491,348 fatalities that year. Only 279 (0.056 %) were due to death from exposure to smoke fire and flames. There are clearly far bigger causes of fatalities that could be targeted to make a much bigger impact. Of the 2009 statistics, 644 people died from falling down stairs or steps.

The point being that we would all like to stop all 491,348 deaths but it is clearly not possible or financially viable to do so. We would not for example ban stairs from houses to avoid the 644 deaths, no matter how tragic those related deaths may be, as it would just not be sensible.

Whilst we endorse the objective to reduce deaths caused by fire in Wales we do not believe that there is sufficient data to determine whether the addition of automatic fire suppression systems in new build 2/3 storey dwellings will be effective in significantly reducing fire fatalities. Newly built homes have required hard-wired smoke detectors since 1992 and we believe that this already makes these properties safer places to live than the older housing stock. More research should therefore be carried out prior to any implementation to determine whether new homes are already providing improved fire safety and that consequently the burden of additional fire protection systems is not achieving the intended goal.

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

No.
Comments: As described above we see no evidence or logic that applying sprinklers to 2/3 storey new build housing would make a material difference to fatality numbers and the cost of doing so is totally disproportionate relative to the unproven gain. However we concede there is merit in properties that may contain residents of lesser mobility e.g. Sheltered Homes, Residential Care Homes and short term accommodation hostels. As mentioned above we recommend that further work is carried out to assess the benefit of fire suppression systems being installed in new and converted dwellings when compared with the existing housing stock. We do not believe that single dwelling houses should come under the regulations as borne out by the BRE Cost Benefit Analysis.

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes.

Comments: We are aware however, that the supply options set out in the BS are not all achievable in the light of varying water supply pressure in the network. Water pressure sufficient to serve domestic sprinklers can not be guaranteed by Dwr Cymru Welsh Water and therefore it would seem that a pump and tank system would be the only way to ensure that the sprinklers

would work as intended at all times. This limits the choice of the designer, has an impact upon the building and plot design, introduces extra maintenance responsibilities and increases the overall cost. The Cost Benefit Analysis should be reviewed in the light of this.

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes.

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

No.
Comments: See comments for question 6 below. We are led to believe that there may be issues with insurance premiums and legionnaires disease if maintenance is not mandatory which have not been fully considered and we believe any decision should be delayed until this has been fully resolved.

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes.
Comments: Maintenance of any system is vital if it is to perform as designed and a guide would help stress the importance of this to any homeowner. No fire suppression system should await a real fire situation to be put to the test.

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

No.
Comments: As already stated we believe that further research is required and that therefore the regulations should not be changed on the dates suggested. Furthermore we would suggest that a longer transitional period be considered so that all concerns raised are addressed.

At the very least there should be a longer term implementation date to allow land purchase to be planned in the full knowledge of the development costs to be faced at the time of build which can be 12 month+ in the future due to timetable to achieve planning. This will also allow developers to decide whether they wish to continue building in Wales or not.

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[39] remain relevant given the proposals covered by the new legislation?

Comments: No comments

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Comments: No. It is clear that implementation of such a change would require a huge training need for installers, supervisors and the public which is currently not available.

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?
Yes.

Comments: There needs to be consistency between the BS and the Approved Documents to ensure that all are aware of the full impact of installing a 'fit for purpose' fire suppression system in dwellings. In particular consideration should be given to the restrictions on type of system as dictated by a lack of guaranteed water pressure. In addition the importance of maintenance should be stressed.

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis
Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?
No.

Comments: See comments for question 12 below

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

No.
Comments: The cost benefit analysis does not account for the problems that are caused by Dwr Cymru Welsh Water not being able to guarantee water pressure sufficient for a mains fed system. This dictates the design of any system and will probably mean that a storage tank is required with a pump. The tank would be considerably heavy and unlikely to be accommodated in a roof space which then requires that it be in an underground location. The maintenance regime for such an arrangement would also be more onerous than mains fed system. Clearly a pump will rely upon an electric supply and the protection of that supply during power cuts should be covered within the regulations.

[39] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

Question 13: **We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:**

Please enter here:

The Industry has gone on record that housing development in Wales is significantly less viable than in England due to lower revenues and higher costs and is already facing a loss of investment from Wales to England. The industry contributes a significant element of Welsh GDP and we would estimate generates circa 40,000 direct and indirect jobs.

This latest proposal, which appears to be based on emotion rather than logic, would cause significant damage to the economic status of Wales with no proven material gain and is not the action of responsible government in our opinion.

126-17935 - Charles Church West Wales

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: **Huw Llewellyn**

Organisation (if applicable): **Charles Church West Wales**

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

No.

Comments:
This is a limited focus policy which ignores consequential impact for the whole of Wales. Copious evidence has been submitted by the HBF and House builders to show that the cost effects of the implementation will massively affect viability of new build homes resulting in a drop in supply and thousands of job losses across Wales.

Ministers should note that the economic impact is real. We have already written to nine Local Authorities in Wales notifying them that we have withdrawn investment for new projects in all or part of their area as it is now unviable to develop there. If this measure is enforced on all new build housing these no go areas will increase and significantly decrease supply of new homes and the thousands of jobs that go with it. The impact could be the equivalent of losing TATA steel from Wales to put it into perspective.

The Assembly's own advisers have advised Ministers that the proposed changes are not sensible on cost grounds and we are strongly of the opinion that there is no robust evidence that imposing sprinklers on new-build housing will have a material affect on death and injury statistics.

If significantly reducing death and injury from fire in homes is the real objective then mandatory fitting of hard wired smoke detectors in all existing homes would clearly make a far greater impact than sprinklers in new homes.

We would also question why this particular fatality area and industry sector has been targeted. According to evidence from the National Audit Office, in 2009, there were 491,348 fatalities that year. Only 279 (0.056 %) were due to

death from exposure to smoke fire and flames. There are clearly far bigger causes of fatalities that could be targeted to make a much bigger impact. Of the 2009 statistics, 644 people died from falling down stairs or steps.

The point being that we would all like to stop all 491,348 deaths but it is clearly not possible or financially viable to do so. We would not for example ban stairs from houses to avoid the 644 deaths, no matter how tragic those related deaths may be, as it would just not be sensible.

Whilst we endorse the objective to reduce deaths caused by fire in Wales we do not believe that there is sufficient data to determine whether the addition of automatic fire suppression systems in new build 2/3 storey dwellings will be effective in significantly reducing fire fatalities. Newly built homes have required hard-wired smoke detectors since 1992 and we believe that this already makes these properties safer places to live than the older housing stock. More research should therefore be carried out prior to any implementation to determine whether new homes are already providing improved fire safety and that consequently the burden of additional fire protection systems is not achieving the intended goal.

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

No.
Comments: As described above we see no evidence or logic that applying sprinklers to 2/3 storey new build housing would make a material difference to fatality numbers and the cost of doing so is totally disproportionate relative to the unproven gain. However we concede there is merit in properties that may contain residents of lesser mobility e.g. Sheltered Homes, Residential Care Homes and short term accommodation hostels. As mentioned above we recommend that further work is carried out to assess the benefit of fire suppression systems being installed in new and converted dwellings when compared with the existing housing stock. We do not believe that single dwelling houses should come under the regulations as borne out by the BRE Cost Benefit Analysis.

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes.

Comments: We are aware however, that the supply options set out in the BS are not all achievable in the light of varying water supply pressure in the network. Water pressure sufficient to serve domestic sprinklers can not be guaranteed by Dwr Cymru Welsh Water and therefore it would seem that a pump and tank system would be the only way to ensure that the sprinklers would work as intended at all times. This limits the choice of the designer, has

an impact upon the building and plot design, introduces extra maintenance responsibilities and increases the overall cost. The Cost Benefit Analysis should be reviewed in the light of this.

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes.

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

No.

Comments: See comments for question 6 below. We are led to believe that there may be issues with insurance premiums and legionnaires disease if maintenance is not mandatory which have not been fully considered and we believe any decision should be delayed until this has been fully resolved.

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes.
Comments: Maintenance of any system is vital if it is to perform as designed and a guide would help stress the importance of this to any homeowner. No fire suppression system should await a real fire situation to be put to the test.

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

No.
Comments: As already stated we believe that further research is required and that therefore the regulations should not be changed on the dates suggested. Furthermore we would suggest that a longer transitional period be considered so that all concerns raised are addressed.

At the very least there should be a longer term implementation date to allow land purchase to be planned in the full knowledge of the development costs to be faced at the time of build which can be 12 month+ in the future due to timetable to achieve planning. This will also allow developers to decide whether they wish to continue building in Wales or not.

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[40] remain relevant given the proposals covered by the new legislation?

Comments: No comments

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Comments: No. It is clear that implementation of such a change would require a huge training need for installers, supervisors and the public which is currently not available.

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?
Yes.

Comments: There needs to be consistency between the BS and the Approved Documents to ensure that all are aware of the full impact of installing a 'fit for purpose' fire suppression system in dwellings. In particular consideration should be given to the restrictions on type of system as dictated by a lack of guaranteed water pressure. In addition the importance of maintenance should be stressed.

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?
No.

Comments: See comments for question 12 below

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

No.
Comments: The cost benefit analysis does not account for the problems that are caused by Dwr Cymru Welsh Water not being able to guarantee water pressure sufficient for a mains fed system. This dictates the design of any system and will probably mean that a storage tank is required with a pump. The tank would be considerably heavy and unlikely to be accommodated in a roof space which then requires that it be in an underground location. The maintenance regime for such an arrangement would also be more onerous than mains fed system. Clearly a pump will rely upon an electric supply and

[40] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

the protection of that supply during power cuts should be covered within the regulations.

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

The Industry has gone on record that housing development in Wales is significantly less viable than in England due to lower revenues and higher costs and is already facing a loss of investment from Wales to England. The industry contributes a significant element of Welsh GDP and we would estimate generates circa 40,000 direct and indirect jobs.

This latest proposal, which appears to be based on emotion rather than logic, would cause significant damage to the economic status of Wales with no proven material gain and is not the action of responsible government in our opinion.

127-17935 - Quenchfire

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name:

Organisation (if applicable): Quenchfire Ltd

email / telephone number:

Your address:

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes ☒
No ☐
Comments:

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes ☒
No ☐
Comments:

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes ☐
No ☒
Comments: I believe that this would be anti-competitive and would keep other proven/tested technology out of the market.

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes ☒
No ☐
Comments: Yes, however other standards should also be considered as a full BS will preclude other tested technologies from use.

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes ☐
No ☒
Comments: There should be a system in place to regulate the correct maintenance and servicing periods for fire suppression systems.

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes ☒
No ☐
Comments:

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes ☒
No ☐
Comments:

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[41] remain relevant given the proposals covered by the new legislation?

Yes ☐
No ☐
Comments:

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

[41] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

Yes ☐
No ☐
Comments:

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes ☐
No ☒
Comments: This will restrict any other tested and proven technologies and makes it very limited.

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes ☒
No ☐
Comments: The costs very much outweigh the benefits of the proposed scheme.

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes ☐
No ☐
Comments:

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

129-17935 - Derbyshire Fire and Rescue Service (Rob Mackie)

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: Rob Mackie on behalf of;
CFO Sean Frayne and Derbyshire Fire Authority

Organisation (if applicable):
Derbyshire Fire and Rescue Service

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes ✓

Comments:

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes ✓

Comments:

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes ✓
Comments: BS9251 is a proven benchmark for domestic and residential systems. DFRS support the continued use of the standard.

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes ✓
Comments: DFRS agree with this stance provided that any other water based suppression systems provide levels of protection similar to that with BS9251. It is important that any systems employed meet the requirements of a suitable British Standard if they are installed under a requirement to meet Building Regulations.

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes ✓
Comments: DFRS are of the opinion that the on-going maintenance of systems is important in ensuring effective functionality. Owners of systems must be encouraged to maintain their systems through advice, awareness and education. The cost of maintenance should also be as low as possible in order to achieve sufficient take up.

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes ✓
Comments: Please refer to the above comment.

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes ✓
Comments:

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[42] remain relevant given the proposals covered by the new legislation?

Yes ✓
Comments: DFRS are of the opinion that all installers of fire suppression systems should be accredited and competent in the installation and maintenance of systems. The National Occupational Standard will provide a benchmark for all installers.

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes ✓
Comments: DFRS are of the opinion that the sources of training may need to be expanded in the future in order to meet any increased demand.

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes ✓
Comments:

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes ✓
Comments: DFRS support the views of the NFSN and other organisations in that the costs to the community and NHS of fire deaths and injuries is higher than that currently shown in calculations and would mirror more closely those shown in research from other countries such as the USA.

DFRS echoes the view that water supply connection costs are critical to the cost benefit analysis and these should be made as straightforward as possible. Connection costs from some other UK water providers are significantly less than the preferred option stated by Welsh Water.

The CFOA commissioned cost benefit analysis undertaken by BRE and published in March 2012 (BRE No 264227 rev 1.1) is a much more considered and balanced report and should be included as evidence of the findings.

[42] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes ✓
Comments: DFRS would further state that the regulations may well encourage an increase in the retro-fitting of existing premises in order to further protect the community.

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

DFRS fully support the Domestic Fire Safety (Wales) Measure and congratulate the Government of Wales on the implementation of this important legislation, which will undoubtedly save lives. DFRS firmly believe that it is vitally important that new housing is well-designed and addresses safety and the needs of vulnerable people. Houses must provide adequate safety for the occupant throughout the occupiers' lifetimes. Sprinklers and other water based suppression systems are exceptionally effective through their ability to control a fire before it develops to life threatening proportions.

130-17935 - Persimmon Homes East Wales

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: Mike Williams

Organisation (if applicable): Persimmon Homes East Wales

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

No.

Comments: This is a limited focus policy which ignores consequential impact for the Whole of Wales. Copious evidence has been submitted by the HBF and Housebuilders to show that the cost effects of the implementation will massively affect viability of new build homes resulting in a drop in supply and thousands of job losses across Wales.

Ministers should note that the economic impact is real. We have already written to nine Local Authorities in Wales notifying them that we have withdrawn investment for new projects in all or part of their area as it is now not viable to develop there. If this measure is enforced on all new build housing those no go areas will increase and significantly decrease supply of new homes and the thousands of jobs that go with it. The impact could be the equivalent of losing TATA steel from Wales to put it into perspective.

The Assembly's own advisers have advised Ministers that the proposed changes are not sensible on cost grounds and we are strongly of the opinion that there is no robust evidence that imposing sprinklers on new-build housing will have a material effect on death and injury statistics.

If significantly reducing death and injury from fire in homes is the real objective then mandatory fitting of hard wired smoke detectors in all existing homes would clearly make a far greater impact than sprinklers in new homes.

We would also question why this particular fatality area and industry sector has been targeted. According to evidence from the National Audit Office, in 2009, there were 491,348 fatalities that year. Only 279 (0.056 %) were due to death from exposure to smoke fire and flames. There are clearly far bigger

causes of fatalities that could be targeted to make a much bigger impact. Of the 2009 statistics, 644 people died from falling down stairs or steps.

The point being that we would all love to stop all 491,348 deaths but it is clearly not possible or financially viable to do so. We would not for example ban stairs from houses to avoid the 644 deaths, no matter how tragic those related deaths may be, as it would just not be sensible.

Whilst we endorse the objective to reduce deaths caused by fire in Wales we are concerned that this is concentrated wholly upon new and converted dwellings. We do not believe that there is sufficient data to determine whether the addition of automatic fire suppression systems in these dwellings will be effective in significantly reducing fire fatalities. Newly built homes have required hard-wired smoke detectors since 1992 and we believe that this already makes these properties safer places to live than the older housing stock. More research should therefore be carried out to determine whether new homes are already providing improved fire safety and that consequently the burden of additional fire protection systems is not achieving the intended goal.

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

No.
Comments: Residential homes and short term accommodation hostels where occupants may well be of varying mobility would seem to benefit from the application of the regulations. As mentioned above we recommend that further work is carried out to assess the benefit of fire suppression systems being installed in new and converted dwellings when compared with the existing housing stock. We do not believe that single dwelling houses should come under the regulations as borne out by the BRE Cost Benefit Analysis. We see no evidence or logic that applying sprinklers to 2/3 storey new build housing would make a material difference to fatality numbers and the cost of doing so is totally disproportionate relative to the unproven gain.

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes.
Comments: We are aware however, that the supply options set out in the BS are not all achievable in the light of varying water supply pressure in the network. Water pressure sufficient to serve domestic sprinkler can not be guaranteed by Dwr Cymru Welsh Water and therefore it would seem that a pump and tank system would be the only way to ensure that the sprinklers would work as intended at all times. This limits the choice of the designer, has an impact upon the building and plot design, introduces extra maintenance

responsibilities and increases the overall cost. The Cost Benefit Analysis should be reviewed in the light of this.

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes.

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

No.
Comments: See comments for question 6 below.

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes.
Comments: Maintenance of any system is vital if it is to perform as designed and a guide would help stress the importance of this to any homeowner. No fire suppression system should await a real fire situation to be put to the test. We are led to believe that there may be issues with insurance premiums and legionnaires disease if maintenance is not mandatory which have not been fully considered and we believe any decision should be delayed until this has been fully resolved.

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

No.
Comments: As already stated we believe that further research is required and that therefore the regulations should not be changed on the dates suggested. Furthermore we would suggest that a longer transitional period be considered so that all concerns raised are addressed. At the very least there should be a longer term implementation date to allow land purchase to be planned in the full knowledge of the development costs to be faced at the time of build which can be 12 months or more in the future due to the time taken to achieve planning. This will also allow developers to decide whether they wish to continue building in Wales or not.

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[43] remain relevant given the proposals covered by the new legislation?

Comments: No comments

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

No.
Comments: Clearly there would be a huge training need for installers, supervisors and the public which is currently not available.

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes.
Comments: There needs to be consistency between the BS and the Approved Documents to ensure that all are aware of the full impact of installing a 'fit for purpose' fire suppression system in dwellings. In particular consideration should be given to the restrictions on type of system as dictated by a lack of guaranteed water pressure. In addition the importance of maintenance should be stressed.

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

No.
Comments: See comments for question 12 below.

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

No.
Comments: The cost benefit analysis does not account for the problems that are caused by DCWW not being able to guarantee water pressure sufficient for a mains fed system. This dictates the design of any system and will probably mean that a storage tank is required with a pump. The tank would be considerably heavy and unlikely to be accommodated in a roof space which then requires that it be in an underground location. The maintenance regime for such an arrangement would also be more onerous than a mains fed

[43] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

system. Clearly a pump will rely upon an electric supply and the protection of that supply during power cuts should be covered within the regulations.

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here: We continue to be concerned regarding the increasing burden of regulation upon housebuilding in Wales. We are already withdrawing from purchasing sites in large areas of the country because their viability is severely affected by legislation. Housing development in Wales is significantly less viable than in England due to lower revenues and higher costs and is already facing a loss of investment from Wales to England. The additional cost of fire suppression systems to all new dwellings will further reduce our ability to provide new homes (including affordable homes) throughout Wales. Housebuilding contributes a significant element of Welsh GDP and we would estimate generates c.40,000 direct and indirect jobs.

The introduction of these regulations, which appears to be based on emotion rather than logic, would cause significant damage to the economic status of Wales with no proven material gain and, in our opinion, is not the action of responsible government.

131-17935 - Staffordshire Fire and Rescue Service (Dean Stevens)

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: Dean Stevens
Director for Prevent and Protect

Organisation (if applicable): Staffordshire Fire and Rescue Service

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes ☒
No ☐
Comments:

Staffordshire Fire and Rescue Service (SFRS) agree with the proposed approach. It is important that the Measure is broad in its scope, including not only residential accommodation, where the majority of fatalities are experienced, but also the traditional areas of high risk, such as Houses of Multiple Occupation and hostels. SFRS also agrees with exemptions made (such as those for hostels occupied for short periods of time). This provides a measured approach for community protection without putting undue economic pressures on industries which have traditionally been a core part of Welsh business. Nonetheless, if evidence identifies that other premises would warrant inclusion within the Measure, this should be considered at the relevant time.

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes ☒
No ☐
Comments:

As above - It is essential that the scope of properties is broad enough to encompass the majority of premises types where the most serious threats to life are posed. It is also sensible to retain options having regard for certain premises where it might not be feasible to provide such protection. The measure will help combat future issues with regard to the ageing population or changes to lifestyle choices and goes some way to future-proofing the building stock to allow for these issues when they arise or become more prevalent. The increasing use of domiciliary care will be enhanced through this provision by allowing an occupant to move from low dependency to high dependency, yet remain in their dwelling. Furthermore, it is highly likely to have a positive impact on fatal fire and injury matrices as time progresses within Wales.

The Measure also goes some way towards indirectly complying with recently issued Coroners' 'Rule 43' letters following notable fire fatalities, which support the installation of fire suppression in building types such as those proposed by the Wales Measure. In addition we are beginning to see a change from the more traditional type of housing construction to that of 'timber framed' developments, which react differently when involved in fire. However, the performance of timber framed buildings when involved in fire will be enhanced as a result of the Measure and, as a consequence, direct and indirect economic and community losses are likely to be significantly reduced.

Importantly, the Measure will also have a positive impact in respect to the incident command tactics and risk assessment techniques used by fire service personnel at incidents. Premises with the element of fire suppression incorporated into the building design can be considered as a significant benefit when balancing the perceived risk to personnel when undertaking firefighting operations. Tenability in the building in question will be improved for the occupants as well reduce the risks to firefighters. It will also assist fire and rescue services in their targeting and deployment of resources when undertaking firefighting / response activity and risk reduction initiatives within the community. If a fire service design was established against all premises being sprinklered it would have a significant impact on the local integrated risk management plans. It could result in more flexible attendance times, the size and weight of firefighting resources required to deal with an incident would be less and the time taken to deal with any incident might also be reduced considerably. This will allow resources to be used more flexibly and possibly more efficiently. Homes and businesses will be able to return to normality much more quickly with a reduced impact on partners and the local and national economy.

The impact on the environment will be improved as less water will normally be used for dealing with certain incidents from suppressed fires as will the emissions in comparison to those from uncontrolled fires. Carbon released from buildings associated with the fire and subsequent re-construction will also be reduced. The increased use of compensatory features in building design will result in greater flexibility and versatility for buildings but also help facilitate a safe and manageable fire safety strategy.

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes ☒
No ☐
Comments: BS9251 is the most appropriate standard to use in this instance as it provides a suitable benchmark to ensure quality control of system components, design and installation without introducing excessive costs. The standard is easy to use, widely available and also provides guidance on maintenance and documentation. However, it is also important, to recognise that European Standards are currently being developed and consideration should be given to adopting these provided they satisfy the required levels of safety to comply with the Standards being suggested and do not result in an adverse impact upon any measures already in place.

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes ☒
No ☐
Comments: The inherent differences between water mist systems and sprinkler systems must be considered when allowing alternative approaches to be used when demonstrating compliance with the proposed Measure. Water mist systems require additional design considerations to be taken into account for a given application. It is important that the protection afforded with the installation of a BS 9251 sprinkler system should not be reduced when an alternative suppression system is installed. It is also important that the requirement to install automatic suppression in premises does not become an opportunity to 'experiment' with different types of suppression techniques. This could result in systems being installed that are not fit for purpose.

Consideration should also be given to the compatibility of spares/components. Allowances should not be made for stand-alone suppression units that only cover one room or part of a room. Sprinklers fitted in accordance with BS9251 should remain the default standard until such time that other standards and systems are proved to give an equivalent level of quality, versatility and reliability.

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes ☒
No ☐

Comments: The proposal not to regulate to require the sprinkler system to be maintained is reasonable in the case of domestic dwellings. This would be difficult to enforce, which in itself could lead to a loss of credibility in the requirement. However, when the systems are installed in premises where there are areas covered by other regulations (such as the Fire Safety Order) under the control of a responsible person, it would be reasonable to require the responsible person to maintain the system.

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes ☒
No ☐
Comments: Whereas the requirement for maintenance of systems in Q.5 would present difficulties, the provision of a householders' guide is an excellent way of highlighting the importance of the system and the benefits it affords to occupants. Moreover, it would support the credibility of the reasoning behind its installation and it is our contention that it would provide a greater encouragement for occupants to maintain the system by being more informed. Estate agents and landlords should be encouraged to provide the guides each time a sprinklered dwelling is sold, changes hands or is re-occupied by a different tenant. The guide could easily be incorporated into any management handbook or pack supplied with a new dwelling and may provide a platform for local businesses specialising in maintenance of systems to advertise, promote their services and, thus support the local economy as a result.

However, it is essential to include guidance on maintenance in the proposed Appendix, which will address any myths surrounding the technicality of maintenance.

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes ☒
No ☐
Comments: Changes to the Building Regulations are wholly acceptable as this measure will undoubtedly lead to a safer community, fewer fire deaths and injuries as well as reduce economic losses through the consequences of fire. Furthermore, the Measure fully supports SFRS's vision of a safe, healthy and inspirational place to live and work and we would support the changes being introduced as soon as is reasonably practicable. Indeed, we continue to urge, and challenge, English politicians to follow the lead being taken by the Welsh Assembly and introduce the same legislation here.

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[44] remain relevant given the proposals covered by the new legislation?

Yes ☒
No ☐
Comments: It might be beneficial to include a section in SF5 MFP7 on consideration being given to the impact that maintenance may have on the fire safety management of the premises whilst it is being carried out i.e. sprinkler zones being out of commission during testing.

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes ☒
No ☐
Comments: Over time it may be that training provision may have to expand to cater for the increased demand. This will provide two main benefits in the form of increased numbers of competent, trained and qualified staff within the sector and also an improvement to the economy in Wales due to training provision being required and skilled workers being able to move freely within the industry. Experiential learning will eventually feed into the update process.

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes ☒
No ☐
Comments: It is appropriate that the Approved Documents have been provided in an amended version in order to reflect the increased use of fire suppression and is something we are supportive of. It is also important, in a Measure such as this, that there is as little scope as possible to 'risk assess' out the requirement to provide suppression. It is assumed, therefore, that the requirement to install fire suppression will be a requirement through regulation, which, in this case, is the correct approach. It is further assumed that although the twenty metre height limit in BS 9251 will be disregarded, the pressure and flow requirements at the hydraulically most favourable and least favourable locations on the system will remain as part of the system design.

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

[44] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes ☒
No ☐
Comments: It is inherently difficult to undertake a cost - benefit analysis that covers all tangible and intangible costs and benefits. It is also difficult to predict the overall long-term impact of Measures such as these being implemented. The introduction of these Measures will have an undoubted long-term benefit in terms of risk reduction, life safety and local economy. Although these factors may not be considered as part of the critical analysis, greater benefits will be derived as the proportion of sprinklered residential stock increases vs. that which is unsprinklered. As the majority of fire deaths and injuries tend to occur in domestic dwelling type environments, these incidences can only decrease in number and severity.

However, as the population increases and ages, the associated risk also increases and these factors must be considered when undertaking future research into the efficacy of the introduction of the Measure. Additionally, other changes such as those seen in England around welfare reform, universal credit, housing benefits will further change the environment in which we live and work and as such we must accept that a direct comparison is not always achievable. Nonetheless, whilst the benefits that may be derived from sprinklers in combating this increase in risk remains intangible at this time, but will eventually become apparent following implementation. Indeed it is our fundamental belief that the benefits will be far greater than those predicted by the supporting documentation.

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes ☒
No ☐
Comments:

Although the “do nothing” option is described in places as having zero cost, it is our contention that this premise fails to capture the direct increased economic cost associated with fire, through rising insurance losses and continued death and injury from fire. This is likely to be further compounded due to the effect of an ageing population, changes to welfare reform and the economic downturn, all of which will undoubtedly widen the gap between the ‘haves’ and ‘have nots’ leading to heighted dependency and depravation. Indeed, we are currently experiencing an all-time low in death and injury, although the overwhelming professional opinion is that this will not continue without a significant change in thinking though the introduction of the Measure such as this. In fact we have already begun to see this low trend start to rise, albeit

slowly at this current time. Conversely, through the introduction of this Measure the trend will be reversed far greater than any other proactive intervention.

Moreover, the potential to undertake a substantial re-design of the emergency service delivery model will be limited without change. If every building in Wales were to be sprinklered the actual emergency service delivery model could be revolutionised.

Although there is a cost associated with up-skilling workforces to fit the suppression systems, there will also be benefits derived for the wider economy as a result of this in terms of greater employability and wider skills sets for those employed in the sector. There is also the opportunity for those employees to obtain recognised qualifications associated with the fitting of such systems as outlined in the NOS referred to as part of the measure.

Consideration should also be given to contributions made to local economies by local installers or existing sprinkler companies moving into the area either permanently or temporarily.

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

Staffordshire Fire and Rescue Service (SFRS) supports the Measure wholeheartedly due to the fact it is directly in line with the organisational vision and mission to make our local communities a safe, healthy and aspirational place to work, live and relax. SFRS also believes that it will help Wales develop a thriving economy. Fitting automatic sprinklers into any building will significantly assist with the dynamic risk assessment undertaken by personnel responding to fires in protected premises and will, undoubtedly, result in lives being saved, injuries being reduced, damage being lessened and more tolerable levels of risk being encountered by fire-fighting crews.

Wales is obviously taking the lead, seemingly aspiring to be the safest place to live in the world whilst seeking to encourage investment in the area (comparisons may be drawn with Vancouver and Scottsdale). Where one householder refuses to build, 10 will be waiting to take their place. We will be pushing for England to follow the lead from Wales. It might even be inferred that the Welsh Government values life more than the UK government.

The buildings that are fitted with suppression under the Measure will be a more versatile building stock that may be used more flexibly to meet the changing future demands that will be put upon it due to changing lifestyles of the population. Implementation of this Measure is the right thing to do and long overdue.

132-17935 - Staffordshire Chief Fire Officers Association.

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: Chris Enness

Organisation (if applicable): Chief Fire Officers' Association.

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes ☒
No ☐
Comments: It is CFOA's contention that with this Measure the National Assembly for Wales is demonstrating the levels of leadership previously unseen by UK policy-makers and, once introduced, will significantly and positively impact in the longer-terms on domestic fire deaths and injuries. Furthermore, it provides a measured approach for community protection without putting undue economic pressures on industries which have traditionally been a core part of Welsh business.

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes ☒
No ☐
Comments: It appears sensible to introduce the legislation with the premises identified within the consultation document including not only residential accommodation, where the majority of fatalities are experienced, but also the traditional areas of high risk, such as Houses of Multiple Occupation and hostels as they have the greatest potential to reduce fire death and injury within the community. Furthermore, it will future-proof those premises against the risk of fire death and injury against any changes in the social environment such as an ageing population. Indeed, the increasing use of domiciliary care will be enhanced through this provision by allowing an occupant to move from low dependency to high dependency, yet remain in their dwelling. However, it would be prudent to monitor the impact of fire on society and consideration

should be given at an appropriate time to review those premises that fall within the scope of the legislation.

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes ☒
No ☐
Comments: BS9251 would currently be the most appropriate standard to use in this instance as it provides a suitable benchmark to ensure quality control of system components, design and installation without introducing excessive costs. The standard is easy to use, widely available and also provides guidance on maintenance and documentation. Nonetheless, consideration for the inclusion of developing standards should be maintained as and when they are able to demonstrate the outcomes required of such standards.

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes ☒
No ☐
Comments: As technology advances it is highly feasible that other systems are developed that are able to provide the required levels of protection. However, it will be essential that such systems satisfy the requirements of the current and agreed British Standards. Moreover, although we are supportive of developing technologies and engaging with designers and manufacturers in respect of innovation it is important that only those systems that have been accepted through a rigorous testing regime are supplied and fitted.

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes ☒
No ☐
Comments: This is a reasonable proposal given the practicalities associated with enforcing the regulation for maintenance of sprinkler systems in domestic premises. However, when the systems are installed in premises where there are areas covered by other regulations (such as the Fire Safety Order) under the control of a responsible person, it would be reasonable to require the responsible person to maintain the system.

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes ☒
No ☐
Comments: Such an approach would support the proposal above. Care must be given to ensure the guidance is clear and easily understood by householders. Furthermore, it is our contention that providing clear and concise information as to the benefits and features of the system would provide a greater sense of security and confidence as well as encouraging the maintenance of the system. It would be helpful if the guide could be incorporated into any routine management pack supplied as part of a new occupation of a domestic premises either as a new build, re-sale or tenancy agreement. In addition it may also provide a revenue opportunity for local businesses who may wish to promote their company through sponsorship or advertising within such a householder's guide.

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes ☒
No ☐
Comments: These changes have been subject to significant delays as a result of the political process involved with this Measure. There is a perception that some civil servants and politicians have appeared to potentially negatively influence the process of regulatory change with respect to fire suppression; potentially at the cost of life safety in the Welsh community. Arguably attempts have been made to influence the consultation by canvassing for comments on the merits of the decision to install sprinklers in the listed premises rather than considering the content of the regulations. This introduces unnecessary delay and confusion to proceedings that could result in some comments that might be of value not being submitted or, more seriously, irrelevant or misguided comments being submitted as part of the consultation.

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[45] remain relevant given the proposals covered by the new legislation?

Yes ☒
No ☐

[45] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

Comments: It will be essential to have fully trained and competent personnel to ensure installation to the highest levels of quality. It is also important to consider the impact on the fire safety management of the premises that any maintenance may have whilst it is being carried out.

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes ☒
No ☐
Comments: It is expected that existing sources of training may need to be extended as demand for such training increases, which will potentially lead to three principle outcomes. Firstly, it will increase the numbers of trained, competent and qualified technicians within the sector. Secondly, it will contribute to the local economy created by this demand, with skilled workers operating freely and competitively within the market. Finally, it will provide competition in respect of training providers and ultimately the costs of installation.

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes ☒
No ☐
Comments: Amending the Approved Documents to increase the use of sprinklers is fully supported by CFOA. However, a concern remains whereby there are examples that such systems or requirements are risk-assessed out leading to a lesser level of protection for life safety in respect of future-proofing premises, e.g. a risk assessment based on the current occupancy is no longer valid if that occupancy changes or the occupier(s) becomes more dependent. Therefore, it is assumed that the requirement to install fire suppression will be through regulation, which, in this case, is the correct approach. It is further assumed that although the twenty metre height limit in BS 9251 will be disregarded, the pressure and flow requirements at the hydraulically most favourable and least favourable locations on the system will remain as part of the system design.

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes ☐
No ☒
Comments: CFOA has concerns regarding the Cost Benefit Analysis. There are inconsistencies in both emphasis and findings in the report - one of which

being a report undertaken on behalf of CFOA by the BRE. Undue focus has been put on the perception that one life will be saved per year in houses fitted with a sprinkler system. Economies of scale do not seem to have been taken into account. These economies not only fail to consider the reduction in cost of installations of systems due to the large volume being installed, but also apply in respect of the significant reductions in death, injuries and damage associated with fires in domestic dwelling type residencies.

Whereas some respondents may have a financial interest in this Measure, it should be noted that there is no profit or material gain for fire and rescue services; support from the U.K. FRS is garnered mainly as a result of the humanitarian benefits it will provide – reduced loss of life and injury for the community, safer firefighters and improved environmental considerations to highlight but a few..

However, CFOA is aware that other stakeholders may have alternative motives leading to a negative response when considering the proposed measures purely in terms of profit and loss accounting.

Accuracy of cost-benefit analysis can be challenged when there is more than one option available to quantify a given cost or benefit element and justification for selection of a preferred choice is required. The fundamental question to be answered within this context is, 'What cost to a life?'

Benefits will be far more reaching than those that are simply economic. It is disappointing to see decisions based not only on profit, but also stakeholders being prepared to voice opinions based upon a lack of information.

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes ☒
No ☐
Comments: There is a danger that the 'do nothing' option assumes no impact. However, this would be a misguided position. Whilst we are currently experiencing the lowest levels of fire death and injury across the UK we know that on average 17 deaths and 503 injuries per annum have occurred in Wales over the past 10 years. Furthermore, professional opinion is that this trend is likely to see a rise over the coming years due to a number of factors that have been previously highlighted. Additionally, a recent report by the Centre for Regional Economic Research at Sheffield Hallam University called 'Hitting the Poorest Places Hardest' suggests that '…*the impact of Universal Credit will be felt well beyond* 2015…and…*the full impact is unlikely before 2018…'.* This in itself will result in a widening gap in prosperity between the best and worst levels of personal and local economic circumstances. A consequence of which will be a greater level of dependency and potential demand from public services such as 'Fire and Rescue'.

Linked to the issue of demand is the limiting impact of not implementing this Measure on the structural design of Fire and Rescue Services. If every

building in Wales were to be sprinklered not only would direct and indirect benefits be realised, but also the resulting delivery model for the emergency response side of the service could be significantly different allowing for potential efficiencies.

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

CFOA has full support for the Measure. The leadership being demonstrated by the Welsh Government will be the envy of other parts of the UK and indeed much further afield. The focus on its citizens and the attempt to make Wales the safest place to live will, in the long-term, encourage investment.

In respect of on-scene fire and rescue staff and commanders, the tactical approach to dealing with fires and the mandatory risk-assessments that are undertaken will facilitate a safer system of work which will reduce firefighter fatalities as well as those of members of the communities. Moreover, given the recent attention drawn to the decisions taken by fire commanders in committing resources into a burning building it could result in a more defensive tactical plan being implemented. Consequently, it may further increase insurance loss with the subsequent impact on the economy.

In addition, there is a changing trend in housing design and building techniques from the more traditional type of housing construction to that of 'timber framed' developments. Whilst these buildings are compliant with the relevant Approved Documents, once a fire has taken hold it will burn with an intensity and energy that is different from that of a brick built property. Nevertheless, the performance of timber framed buildings when involved in fire will be enhanced as a result of the Measure and, as a consequence, direct and indirect economic and community losses are likely to be significantly reduced.

Finally, the installation of sprinklers will promote innovation and, above all, provide a more versatile building portfolio that is future-proofed for those things we already predict will occur and potentially others that are not yet apparent.

133-17935 - McCarthy and Stone (Marc Primaroh)

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: Marc Primaroh

Organisation (if applicable): Group Research & Development Manager
McCarthy & Stone Retirement Lifestyles Limited

email / telephone number:

Your address:

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes ☐
No ☒
Comments: notwithstanding that any death should where practical and feasible be avoided you appear to go against your own data findings. With all regulations there has to be accountability but even though you state it does not demonstrate to be a cost viable solution you appear to be considering ignoring the normal viability approach and are considering this regulation change irrespective of the cost value of life. The transcripts themselves do not support the position of adopting the approach. The death figures do not relate specifically to deaths that may have been avoided due to sprinkler systems nor do they distinguish between your best guess at new homes figures against that of existing stock incidents. It can be demonstrated that the statistics are not robust nor represent correctly the effect of adoption of sprinklers in new build homes.
We therefore cannot support a proposal based upon exaggerated and incorrect data, we cannot agree that the death rate decrease would be reflected in reality against your propositions.

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes ☐
No ☒
Comments: we consider the list of residences to be incomplete and missing several types of buildings/residences that should and would also benefit from similar fire safety measures, if they are to be applicable to the provided list.

We would propose the list if the proposals go ahead should include HMO's, nursing homes (residential), youth hostels and similar residence types. However, we cannot clearly define from the consultation information which if any of these residence types the fire deaths and injuries actually or are purported to occur in. If, as is noted at events and dialogue and text, there is still a high level of fire incidents then why would any residence group be omitted? Indeed, there is evidence that fire deaths were occurring in large numbers in such accommodation as temporary student flat/house sharing buildings (HMO's of a sort) in England cities and that the application of higher levels of fire protection including better means of escape and sprinkler options dramatically reduced these death levels. Why then has the WG determined to ignore some residence types especially the short term accommodation of students and young people where there is likely to be more carefree

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes ☐
No ☒
Comments: we would agree that BS 9251 be used as guidance but not to be limited to this single Standard. There are other commensurate Standards including EU Standards that may also provide suitable guidance for fire risk designed prevention. Therefore BS 9251 should be referenced but not restricted in its use.
In addition care over interpretation of the BS 9251 Standard must be considered where within the Standard there may be more than one solution but that this need not necessarily be the right solution in all cases. In other words, there is a duty of care that the chosen solutions within BS 9251 or other Standards are specifically applicable to the situation being assessed and designed for.
In respect of water supplies to such solutions we see a high risk in that the provision suggested are neither robust nor rigorous. In contacting water authorities is appears no confidence in supply pressures or indeed supplies is prevalent. With flatted schemes there is a requirement that differs from housing. Such provision of tanks and storage vessels, pumps and ancillary equipment is harder to deploy where it is of a larger scale and the Impact Assessment does not account for the loss of revenue from accounting for the tank provisions within the development which will lead to a reduction in saleable area. Such tanks would take up the space of a 1 bed flat.
Therefore, it is critical to the solution that the design incorporates the correct solution based upon the best water supply option available and that this addition accost is accounted for at land acquisition stage and balanced against the viability of the scheme progressing. We would consider a mains fed solution would not be suitable in any flatted schemes therefore introducing additional build cost above that of the IA.
Consider also, within the consultation there is no mention of guaranteed power supply to pumped solutions. Where in the consultation IA has it

accounted for such provision? In the event of a power failure you lose your pumped solution unless you also include for suitable UPS systems which increases the cost burden even further.
Tank in roof solutions are not viable on either cost or structural consideration in flatted schemes, they would simply be too large to accommodate without serious design issues which would reflect in difficulties with planning conditions.
Where appropriate we provide dry riser fire fighting solutions where they are independent of the water mains and charged by the attending fire appliance.

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes ☒
No ☐
Comments: however such flexibility should not be solely restricted to British Standards but should include EU Standards where the provision can be seen to be robust and more applicable to the fire suppression solution required.

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes ☒
No ☐
Comments: there is little point in providing a high level fire suppression system if it is then to be left to chance as to whether it remain operational or not. It seems absurd to us that on the one hand you will enforce the provision of a fire suppression system but on the other leave to pure chance that such systems remain operational. What are the legal ramifications of this? If a fire suppression system in installed and the occupier neglects to keep it operational then in the event of a fire and no suppression then where would the law see responsibility lay? Similarly insurance company claims. Third party risk must be established and protected. Where fire suppression systems are enforced they will inevitably lead to a reduced fire prevention measure elsewhere such that complete dependence on the fire suppression system remains. Therefore you must regulate the maintenance of such installations the same as is required of other non dwelling buildings.
Of course your IA has not included for such regulated provision.
Guidance clearly states that automatic fire safety provisions are maintained.

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes ☒
No ☐

Comments: alongside our consideration in Q5 it is essential the owners and occupiers of dwellings with automatic fire suppression systems are aware of the correct and diligent maintenance requirements of such systems. However, it is a well know fact that maintenance of building services and systems in dwellings when left to the owner's responsibility is poor and certainly not robust. We consider proper maintenance of safety systems to be paramount to occupier safety there it must be dealt with seriously. Unlike many other systems, a system that provides safety if not maintained can kill. The fire authorities have excessive evidence that even simple devices such as smoke alarms are more often than not inoperable due to poor or no maintenance. Indeed, perhaps some of the fire deaths reported in this consultation comes from this point alone and that had a fire suppression system been installed and also not maintained then it would have had reduction to the fire death statistics.
What legal means do you consider deploying to ensure owners simply do not "switch off" their systems? In such situations, if the remaining fire safety measures have been downgraded due to sprinklers being fitted then the home would be inadequately protected.

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes ☐
No ☒
Comments: it is an absolute need that sufficient time and transition arrangements are in place to allow for the correct level of application of the proposed regulation, should it go ahead. Without such allowance for implementation then systems will be likely rushed through and poorly designed and installed. The industry needs time to adopt such solutions into their design matrices and cost budgeting.
We would therefore suggest a longer transition period be provided to allow for all matters to be resolved and concluded fully such that fire suppression systems would then be appropriate and robust.

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[46] remain relevant given the proposals covered by the new legislation?

Yes ☐
No ☒
Comments: generally fire suppression systems by way of sprinkler style systems fall within the remit of non dwelling constructs to date. Hotels, offices and the like which are quite different from family housing in their design and

[46] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

management approaches. Standards for training and qualification that are applicable to non domestic cannot simply be sized down to accommodate small dwellings, not even flats. As with transitional requirements suitable time must be provided for the skills organisations to develop the necessary training and qualifying conditions for dwelling designs. As with other building services not all are scalable. Indeed, there is risk of overkill where simple domestic solutions are just that.
What measures are in place for informing the fire fighting industry, how will they know which dwellings have sprinklers and which not? Will fire fighting divisions respond differently if they know fire suppression systems are deployed, but how would they know if they are maintained and therefore operational?

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes ☐
No ☒
Comments: fire suppression solutions to this degree of application will need suitable increase in training and skill sets within the whole industry. For financial viability fire suppression in homes cannot be dealt with by high cost specialist but must have the opportunity for suitably trained and qualified/certified levels of expertise specifically aimed at housing scale.

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes ☐
No ☒
Comments: in as much as that within the consultation and the approved documents there is still conflict and disparity. For example the AD calls for systems to be properly maintained yet the consultation gives little weight to this. The AD and the consultation must be aligned to provide the same level of guidance. Address the contradictions and revise the AD appropriately to cover our raised issues.

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes ☐
No ☒
Comments: The cost benefit analysis clearly demonstrates that installing fire sprinklers into new dwellings would not be cost effective compared to the death value rate used. It is also reasonable to assume that the negative net present values provided within the results of the assessment would be

impacted even further. Although the figures for flatted scheme generally tend to be similar to our own cost evaluation for flatted schemes this only covers the specific solutions within the flats. The IA does not cover communal areas in flatted schemes, the cost of combination and pumped systems as well as the loss of revenue from lost saleable areas that have to go to accommodate the service equipment. Additionally we consider insufficient cost value has been included for maintenance of such systems, this extra cost burden will have a direct affect on saleability of new properties where potential purchasers would need to be informed of the ensuing annual service cost of said system.
Where in the analyses does it cover the contingency that, without suitable and rigorous legal measures to enforce maintenance, owners simply disengage their fire sprinkler systems and then rely on other fire safety measures? In providing fire sprinklers the designers would quite rightly reduce fire safety measures elsewhere in the design. However, if the design cannot have assurance that maintenance will be carried out the under CDM can they then sensibly remove other fire safety measures that they would have included if no sprinkler system were installed. Does the IA allow for in its net present values for a decrease on costs associated with removal or decrease in other fire safety measures? If the IA allows for such decrease (savings) elsewhere but the designer cannot be bound to remove the provision due to CDM legalities then the IA is invalid in this specific where no saving could be made to other fire safety measures.

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes ☐
No ☒
Comments: it is our opinion that the IA has not accounted for all contingencies and affects of the implementation of sprinkler systems into regulations. In most cases a mains water supply would be questionable therefore a tanked solution is the dominant solution. However, the cost of such systems has not been correctly associated; it’s not just about cost but also about practicality. Lack of practical application of tanked systems means they either offset valuable saleable space o have to be taken externally creating additional cost in them being underground or in protected enclosures. Has planning limitations been considered with the latter? Together with the provision of SUDS and on site mitigation and the like it is likely no suitable area of ground would available for siting of a tank above or below ground.
In what part of the IA do you cover the carbon cost of sprinkler systems, we are not thinking about operational carbon cost (as hopefully they will never operate) butt he carbon cost in application and maintenance. All require people to travel to an installation.
It has been seen that the costs are not robust and this has been discovered to you in various events and meetings. Ore work is needed in the area of realistic costs for installed systems.

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

Overall the cumulative impact of the introduction of sprinkler system will be to increase the burden on house building in Wales. In our opinion the Welsh housing market values cannot support the true cost increase associated with these systems. This will inevitably lead to a decrease in housing in Wales.
We have mentioned earlier the lack of consideration for guaranteed energy supplies to pumped systems. This puts any pumped system at high risk of failure at a time of fire risk. When a fire escalate within a home it is likely it will cause electrical failure. Indeed the action of a sprinkler may well cause electrical failure if its action interferes with an electrical provision. Although suitable residual current protection may be in place would this be sufficient to ensure continuous supply to the pump, possibly. Grid failure though kills the fire protection and we have already pointed out the decrease in other fire safety measures that will happen to accommodate sprinkler systems. As such then, the pump should sensibly be provided with a guaranteed and protect supply. This is more important in flatted schemes where the pump would be on a landlord's supply and not the individual flat supply.
As builders of flatted schemes we have some concern about the lack of continuity between the dwellings and the non dwelling elements of flatted schemes. In our evaluations of fire safety systems we have found that the optimal safety measure with elderly persons is to keep them within the safety of their flat, which has been designed for passive protection throughout. This of course may not provide protection in the flat on fire. However, the adoption of sprinklers in flats then forces occupiers out into an area that has a different fire safety strategy. Your proposal excludes common parts of flatted schemes from the requirement for sprinklers. Logic would suggest that if sprinklers are as significant a life saver as your consultation suggests then surely it should apply equally to common parts as well. However, this would further challenge the IA because if common parts were also included in the IA then it would significantly increase the cost of a system provision.
In light of your evidence that supports the fact that sprinklers are not cost viable against decrease in death benefit we question the validity of the proposal.
We find it ironic that the introduction of a water based fire safety system in an area where we find the most difficulty with obtaining guaranteed water supplies and pressures has been overlooked.
We would therefore strongly propose that the introduction of sprinklers into homes is further and more rigorously reviewed to ensure all matters are considered and fully judged before implementation. There are far too many unresolved issues for this to become a regulation.

134-17935 - ISP Architects Ltd comment

Good Afternoon,
On behalf of ISP Architects Ltd, I would like to take this opportunity to comment upon the consultation for the proposed legislation of Fire Sprinkler Provision to ALL new dwellings in Wales.

Whilst we of course welcome research and legislation into any initiatives that will reduce the risk of deaths from Fires in any buildings, we do not believe that this current legislative suggestion is the best course of action.

We are currently working with both private developers and also Social housing developers to provide new housing in our County and other surrounding counties. At present planning legislation has been updated to ensure that ALL new dwellings meet a minimum standard of sustainability measured by the Code for Sustainable Homes. This on average has pushed the cost of developing a new house up by approximately £10k. This is in stark comparison to new housing in England that does not need to meet these strict sustainability standards. The advice provided by BRE for the consultation has suggested that sprinkler systems to new Houses would cost in the region of £3075 and £875 per flat. This of course pushes construction prices of new housing even further meaning that it is nigh on impossible for 'affordable' housing to be provided in the future. First time buyers will definitely be priced out of the market.

We fully condone the provision of more sustainable and energy efficient housing stock but have found that this comes at not just extra fiscal price but also reduces new houses in terms of size, overall quality, useable private space and general design.

From our understanding the two main options for providing sprinkler systems to new dwellings would be a standard sprinkler tank and heads system, or a system that could be fed straight from the mains.

Generally within our County and surrounding counties, we have found it is not possible to provide sprinkler systems off the mains as the water pressure required for the systems cannot be guaranteed by the local water suppliers and their infrastructure currently in place. This is also impossible for any properties that are located up on hills and mountains as normally found in Wales as gravity does not work that way!

We are then looking at the tank and head system which means that space needs to be provided to the lofts of houses of a sufficient size to carry the tank. There also needs to be sufficient room for maintenance of these as required by Building Regulations. The structure of the buildings will need to be upgraded in order to ensure the additional weight and loadings of the tank can be taken. Ceiling voids will need to be provided to house the sprinkler heads and pipe work in rooms. This will all be additional costs to the building.

And in the case of flats, the additional space required for maintenance room, sprinkler tanks etc will mean that roof spaces to flats may now be huge and require walkways, and also their own sprinkler system as per current Building Regulations. The additional costs to the flats will be much more than £875 and the additional fees to tenants and buyers will be greater even still for the maintenance of these systems.

As we understand it, there were 17 deaths from fire in Wales last year. From our own research, we have deduced that of these deaths in housing, they were in fact in existing housing stock with poor detection and escape routes.

We think that at this time, with a poor local economy for any construction work and developers already struggling with current legislation to provide affordable or any housing, time, money and effort would be better spent researching into perhaps grant schemes to update existing housing stock in the Country with modern detection systems and useable and safe escape routes.

The poor five souls who lost their lives last year in Prestatyn after an arson attack on their home was of course a stark reminder that fire does in deed kill, but their home was not equipped with acceptable escape routes in the event of fire.

We hope that these comments can be taken constructively.

Kind Regards,

Alison Jones
On behalf of ISP Architects Ltd

135-17935 - Royal Society of Architects in Wales

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: Mary Wrenn, RSAW Director

Organisation (if applicable): RSAW

email / telephone number:

Your address:

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes ☐
No ☒
Comments: There is no obligation on the Welsh Government to implement the recently devolved powers to require additional Domestic Fire Safety Measures, such as sprinklers. As such, the proposed implementation is not required through Building Regulations or otherwise.

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes ☐
No ☒
Comments: There is no evidence provided to suggest that all 'residence' described under the proposed list will have an improvement in life safety as a result of their inclusion in the Domestic Fire Safety Measures. As such, any possible requirements should be limited to those types of residence where an improvement in life safety over current requirements can be demonstrated. It should be noted in this regard that evidence provided can only be deemed eligible if the buildings it is based upon were constructed to current relevant fire safety standards – any proposed requirements are not intended to be retrospective and hence will not impact buildings built to previous fire safety standards, therefore the life safety of these buildings is not an appropriate baseline.

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes ☐
No ☒
Comments: Whilst we acknowledge in principle that a British Standard is the most appropriate reference document for such requirements, the current guidance in BS9251 is too onerous for most circumstances that the requirements might be applied to, and leaves some elements to interpretation. Any requirements should be deferred until less onerous and more precise standards that are currently under development can be completed and published.

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes ☒
No ☐
Comments: The requirements should be deferred until more appropriate standards are available and should be applied to more specific types of residence where a genuine benefit to life safety can be demonstrated

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes ☐
No ☒
Comments: Whilst we are opposed to the wholesale introduction of Domestic Fire Safety requirements, failure to require maintenance of any systems installed will almost certainly result in some of the life safety measures not operating in the event of a fire. Given such measures may have resulted in a relaxation of other, ‘passive’, life safety, the overall effect will be a reduction in life safety in the buildings.

Question 6: Do you agree with the proposal to produce a householder’s guide to encourage the maintenance of fire suppression systems?

Yes ☐
No ☒
Comments: Whilst we support the principle of householder guides in this instances and all others, introducing solely the ‘encouragement’ for householders without the requirement to maintain will be ineffective and is likely to result in a reduction in life safety.

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes ☐
No ☒
Comments: No, the requirements should be fundamentally reviewed and any enhancements to Domestic Life Safety that can be demonstrated as beneficial should be introduced in a future revision of the Building Regulations.

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[47] remain relevant given the proposals covered by the new legislation?

Yes ☐
No ☐
Comments: We are not able to comment in detail on this.

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes ☐
No ☐
Comments: We are not able to comment in detail on this.

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes ☐
No ☒
Comments: No, the requirements should be fundamentally reviewed and any enhancements to Domestic Life Safety that can be demonstrated as beneficial should be introduced in a future revision of the Building Regulations.

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes ☐

[47] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

No ☒
Comments: No, the analysis uses figures for the number of lives saved derived from all historic deaths or injuries in fire, rather than based solely on those that occurred in buildings built to modern regulations. Based on the reasonable presumption that previous changes to building standards have improved life safety, the analysis therefore significantly overestimates the number of lives saved or injuries avoided. It therefore significantly undervalues the construction cost per life saved.

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes ☐
No ☒
Comments: We are not able to comment in detail of the appropriateness of the processes behind the Regulatory Impact Assessment. We do believe that the proposed requirements are targeting the wrong buildings by tackling all new residential construction, rather than specifically identifying higher risk property types such as dementure care homes and older properties used as Houses of Multiple Occupancy

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

The RSAW commends and supports any efforts to enhance life safety in the built environment. However, the current proposals put the wrong life safety measures in the wrong buildings, and we believe will both reduce life safety and place an additional burden on the homeowners and construction industry.

136-17935 - Ash Fire Management & Ventilation Systems Ltd

CONSULTATION ON DOMESTIC FIRE SAFETY (WALES) MEASURE 2011

Consultation Response Form:

Name: Paul Evans
Organisation: Ash Fire Management & Ventilation Systems Ltd

CHAPTER 2 PROPOSED APPROACH

Question 1: Do you agree? NO

Comments: Building Regulations cover all aspects of Fire Protection and should not be tailored to any product or trade. Alternative systems should be investigated. To apply the measure to all new residences is unnecessary

Question 2: Do you agree? NO

Comments: The Measure does not embrace any changes to the Built Environment processes required to meet the 2016 target for Zero Carbon Emissions in new buildings. A more targeted approach should be adopted embracing alternative systems as well as sprinklers.

CHAPTER 3 DESIGN, TESTING AND INSTALLATION OF RESIDENTIAL FIRE SUPPRESSION SYSTEMS

Question 3: Do you agree? NO

All fire systems should be fit for purpose. BS9251 is sprinkler specific and excludes alternative systems.

Question 4: Do you agree? NO

Comments: The Measure should have the capacity to embrace all existing and new technology

CHAPTER 4 MAINTENANCE OF RESIDENTIAL FIRE SUPPRESSION SYSTEMS

Question 5: Do you agree? NO

Comments: Under ISO 9001, to which all accredited companies subscribe and work to, has maintenance as an essential part of any system. If there is no insistence on maintenance of the system, what is the point in having it in the first place?

Question 6: Do you agree? NO

Comments: To ensure the system is working as intended and fit for purpose, and to avoid unnecessary accidents or incidents, only fully accredited persons should carry out the maintenance of the systems

CHAPTER 5 COMMENCEMENT

Question 7: Do you agree? NO

Comments: This should be abandoned or deferred as the current regulations are fit for purpose and also for all the reasons in the comments to the previous questions

CHAPTER 6 INDUSTRY COMPLIANCE AND TRAINING

Question 8: Do you agree? YES
Comments: All systems should be professionally maintained
Question 9: Do you agree? NO
Additional training will be required for all Fire Risk Assessors and Responsible Persons

PART 2 PROPOSED AMENDMENTS TO APPROVED DOCUMENTS

Question 10: Do you agree? NO
Comments: As I strongly disagree with the new Measure

PART 3 ANALYSIS

Question 11: Do you agree? YES
Comments: It clearly shows that there is no justification for the Measure. Annually, more people die of Hypothermia in Wales than in house fires.
Question 12: Do you agree? NO
Comments: No consideration has been given to the failures of sprinklers to address the issue of fatal cold smoke and fumes in the early stages of a fire. Also who would face the consequences if there is an unfortunate loss of life through smoke inhalation in a residence where sprinklers have been installed?
Question 13: Related Issues
Should the Assembly legislate for sprinklers and a failure occurs, the chain of responsibility will end in the Assembly Halls. I advise caution in imposing this Measure due to the shortfalls in sprinklers mentioned in my previous comments.

I am not ‘anti-sprinklers’ per se but am against sprinklers being legislated for as the only solution. All systems should be given due consideration for the targeted, more vulnerable or susceptible members of the Welsh communities.

137-17935 - South Wales Fire and Rescue Service (Huw Jakeway)

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Chief Fire Officer Huw Jakeway

On behalf of the three Welsh Fire & Rescue Services

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes ☒
No ☐
Comments: This method is the most appropriate for implementing the Measure. Without an amendment to Building Regulations which clearly stipulates (by way of a new unambiguous regulation) the requirement to fit automatic water suppression systems in those premises covered by the Measure, it would be possible for applicants to argue that they could demonstrate equivalent levels of safety by other means thus negating the requirement to install sprinklers, thereby circumventing the intent of the Measure.

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes ☒
No ☐

Comments: The list of residences appears appropriate; however more detailed guidance is required regarding the difference between a boarding house and a hotel. Some hotels now house guests on a relatively long term basis, such as families awaiting social housing, whilst also providing them with full board. If a premises of this nature , was either newly built or extended and called a hotel by the developers there would be no requirement for sprinklers, if on the other hand in a true reflection of its intended purpose it was called a boarding house, then sprinklers would be required.

Whilst distinctions such as this may appear pedantic, it is precisely this level of detail which the regulating authorities will have to deal with; more detailed guidance regarding the exact nature of the categories of residence, either in the Measure or as supporting guidance would be welcome

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes ☒
No ☐
Comments: For the majority of premises caught by the Measure BS9251 would provide an appropriate standard, whilst for some larger premises BS12845 may be more suitable.

The potential for installers and designers to derogate from the standard should not be excluded; strict adherence to BS9251 would require that only parts conforming to BS9252 would be acceptable. At this time there are no sprinkler heads available which conform to this standard. The designer should retain the option to use alternative components, as is the case presently, as long as those components are tested to an accepted standard such as UL 1626 where there is a data sheet available which supports their suitability for the application in question. Similarly, where a designer chooses to utilise another standard such as NFPA13d for the entire system this should be permissible within the Measure as long as the proposed standard has been robustly tested and found appropriate for the application in which it is to be used.

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes ☒
No ☐

Comments: Whilst some degree of standardisation is necessary over-prescription could have the effect of stifling innovation. Whatever standard is utilised, the suppression system must be suitable for the application it is being proposed for and must be designed and installed to a recognised standard. In house testing alone should not be acceptable.

Any system installed must be true to the intent of the Measure, and therefore providing protection in all those areas of the building caught by the Measure. It should not be sufficient for a designer to propose a system which would protect only the access rooms and escape routes, due cognisance must be given to the fact that 53% of all fire fatalities occur in the room of origin and it is within these rooms that the Measure will have its greatest impact.

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes ☐
No ☒

Comments: For those premises and parts of premises which fall under the Regulatory Reform (Fire Safety) Order 2005 the maintenance of suppression systems can and should be enforced under the Order. Article 17 of the Order states:

17.—*(1) Where necessary in order to safeguard the safety of relevant persons the responsible person must ensure that the premises and any facilities, equipment and devices provided in respect of the premises under this Order or, subject to paragraph (6), under any other enactment, including any enactment repealed or revoked by this Order, are subject to a suitable system of maintenance and are maintained in an efficient state, in efficient working order and in good repair.*

This is of particular relevance where design freedoms are allowed on the basis of sprinkler provision which would have the effect of reducing the passive structural elements of fire safety such as fire doors, compartmentation and fire resistance.

For those premises and parts of premises which do not fall within the Order, whilst not ideal, the proposal not to regulate is acceptable due to the difficulties which would be experienced in trying to regulate the maintenance of the systems.
If systems are mains fed the maintenance requirements are minimal: the heads and pipework require no maintenance, the only part of the system which requires regular maintenance is the pump which is fitted to tank and pump systems, or the jockey pump if fitted. For this reason mains fed systems should be fitted wherever possible. The problems of lack of maintenance will reduce over time as market forces come into operation. Currently many householders use service providers to maintain their heating systems and many of these service providers such as gas undertakers have branched out into other areas of house maintenance; it is not unreasonable to assume that these companies will also tender for sprinkler maintenance as it is relatively straightforward. Additionally, some companies are now offering a self starting pump set which automatically turns over weekly or monthly, this would reduce the likelihood of system failure.

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes ☒
No ☐
Comments: This is an essential element of the Measure; householders are largely unaware of the operation and limitations of a sprinkler system. An easily understood guide will reduce the incidence of fire suppression systems being rendered ineffective by over painting of sprinkler heads, placing large items of furniture within close proximity to heads/ nozzles etc.

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes ☐
No ☒

Comments: Whilst it is accepted that the impact for builders, particularly Small and Medium enterprises (SMEs) may be considerable, and that a transitional period of 6 months would in some degree offset the impact, this leaves considerable scope for developers to make Building Regulations applications for large numbers of buildings which could significantly reduce the number of sprinklered buildings in the first three years of the Measure.

The benefits to the building industry from the proposed approach will largely be available to the larger concerns only as they have the financial capacity to acquire land, planning permission and Building Regulations approval, it will be of limited value to S.M.E.s in the industry as they will lack the capacity to forecast and pre-plan to the same degree.

The design implications of the new standard have to a large extent been addressed by existing guidance, system design will be of approved standards which are already available, the design freedoms, or 'trade-offs' are largely those which currently exist within the approved documents and British Standards. The building industry has had almost two years to address training and supply chain issues, as discussed above the specifications need no development as they are existing.

There is a significant impact for the Fire and Rescue Services in Wales. Each of the Services will be consulted on all Building Regulation applications within their Service area for premises which the Regulatory Reform (Fire Safety) Order 2005 apply. If they are subjected to a large number of large scale developments intended for the following three years this will significantly increase the workload of the respective fire safety departments.

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[48] remain relevant given the proposals covered by the new legislation?

Yes ☒
No ☐

Comments:

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes ☒
No ☐

Comments: The issue of fitness for purpose will not be affected by the implementation of these regulations, however, the capacity may not be sufficient. Consideration should be given to an approvals process for any companies seeking to enter the training provision market in order to reduce any possible reduction in training delivery standards.

[48] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes ☒ With reservations
No ☐

Comments: Whilst the majority of the changes are appropriate, paragraph 18.13 in Approved Document B volume 2 – Buildings Other than Dwelling houses implies that a sprinkler system installed to BS: 9251 would be appropriate for use when designing a mechanical smoke extraction system for a basement, BS12845 allows a designer to choose a nominal fire size (mW) based on assumed maximum area of operation, this is not possible under BS9251 and an assumption of a 5mW fire may be incorrect.

Additionally, the issue of duration of supply could have serious implications for firefighters; for instance firefighting in basements is arduous and dangerous, therefore, time must be taken before affecting entry to ensure that all health and safety protocols are being observed by responding fire crews. A residential system installed under BS: 9251 has a guaranteed supply of 30 minutes and this is likely to be sufficient to control the fire until internal firefighting operations can be commenced. However, a domestic system under BS9251 has a guaranteed supply of only 10 minutes and the system would have ceased to operate before firefighting operations can be commenced; this substantially increases the risk to firefighters. Mechanical ventilation of basements should be acceptable only where a BS: 12845, or equivalent system is provided.

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes ☐
No ☒

Comments: The cost benefit analysis for Wales follows the same methodology as the 3 previous analyses, these analyses use the ‘green book’ estimated cost which is based on the Department of Transports cost of a death figure. This figure does not take into account the cost of fire service attendance; this seems incongruous when assessing the cost of fire. It is reasonable to assert that the inclusion of these not insubstantial costs would have a positive effect on the cost benefit analyses,

possibly bringing further premises into the cost neutral or cost beneficial outcomes of the analysis.
The costs for tanks and mains connections, even taking into account the sensitivity analyses, are overstated. Many new large scale developments will benefit greatly from economies of scale.

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes ☒ With reservations
No ☐

Comments: Option 3 (Do nothing) is considered as having no cost, whilst it is accepted that this option calls for no capital outlay, doing nothing will not deliver the net benefit predicted for the previous two options. Therefore, the cost of doing nothing could be as high as £48.8m (option 1)

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

The issues regarding water supply are overstated, the current situation for firefighting water is that the water undertakers are signed up to the Water UK National Guidance Document on Water for Firefighting, despite this they are unable to guarantee the supply for firefighting to the flow requirements of this document. Where these requirements cannot be met the developer is supposed to provide a 45,000 litre tank supply for firefighting. The developers take great pains to demonstrate that, whilst the water undertakers will not guarantee supply to the flows and quantity required, the day to day requirements for potable water for general household purposes are such that at any given time the water supply to the development is adequate to meet the flow requirements for firefighting purposes. Housing developments with units of detached or semi detached houses of not more than two floors should have a water supply capable of delivering a minimum of eight litres per second through any single hydrant. This equates to 480l/min, more than adequate for a BS: 9251 domestic standard sprinkler system which requires 109 l/min.

Multi occupied housing developments with units of more than two floors should have a water supply capable of delivering a minimum of 20 to 35 litres per second through

any single hydrant on the development. This equates to 2100l/min, more than adequate for a BS: 9251 Residential standard sprinkler system which requires 210 l/min.

138-17935 - Watkin Jones Homes

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: G Owen

Organisation (if applicable): Watkin Jones Homes

email / telephone number:

Your address:

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes ☒
No ☐
Comments:

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes ☐
No ☒
Comments: We do not agree that this proposed change should include single occupancy houses and development schemes for 6 flats or less within one building.

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes ☒
No ☐
Comments:

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes ☒
No ☐
Comments:

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes ☐
No ☒
Comments: Regulation should be required where the installations are installed in multi-occupancy premises.

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes ☒
No ☐
Comments: Householders within multi-occupancy premises should be provided with guidance.

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes ☒
No ☐
Comments: Yes for multi-occupancy premises but not for single occupancy houses and development schemes for 6 flats or less within one building.

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[49] remain relevant given the proposals covered by the new legislation?

Yes ☒
No ☐
Comments:

[49] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes ☒
No ☐

Comments:

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes ☐
No ☒
Comments: We do not agree that these changes should include single occupancy houses and development schemes for 6 flats or less within one building.

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes ☒
No ☐
Comments:

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes ☒
No ☐
Comments:

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

We do not agree that this legislation should include single occupancy houses or development schemes for 6 flats or less within one building.
This change will have a serious impact on the construction industry and the

economy and will increase the areas of Wales where it will be not be financially viable to construct much needed new hosing.

140-17935 - Armstrong Priestley Ltd (Terry Bennett)

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: Terry Bennett

Organisation (if applicable): Armstrong Priestley Ltd

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes ☒
No ☐
Comments:

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes ☒
No ☐
Comments:

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes ☒
No ☐
Comments:

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes ☒
No ☐
Comments:

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes ☐
No ☒
Comments: Otherwise installed systems may become unreliable and fail when needed

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes ☒
No ☐
Comments:

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes ☒
No ☐
Comments:

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[50] remain relevant given the proposals covered by the new legislation?

Yes ☒
No ☐
Comments:

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes ☒

[50] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

No ☐
Comments:

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes ☒
No ☐
Comments:

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes ☒
No ☐
Comments:

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes ☒
No ☐
Comments:

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

141-17935 - Devon and Somerset Fire and Rescue Service

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: Mike Burroughs (on behalf of Chief Fire Officer Lee Howell)

Organisation: Devon and Somerset Fire and Rescue Service

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes ☐✓
No ☐
Comments: This appears proportionate and uses a well proven method

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes ☐✓
No ☐
Comments: This covers the majority of residences where fire related deaths occur. Paragraph 28(d) appears to be contradicted in Table 1. Paragraph 28 (f) has complex wording and may be subject to varying interpretations. Is there scope to include major refurbishment in future revisions? This would bring sprinkler protection to a wider range of dwellings including some of the existing premises housing particularly vulnerable people especially in rented accommodation. Early research into rates of fire by tenure suggests that 22% of fires occur in 8% of the housing stock (rented from private landlords). It should be stressed that this is an interim result in DSFRS and more work is required to get the picture from other FRS.

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes ☐✓
No ☐
Comments: BS 9251 provides a simpler and more proportionate system for the vast majority of circumstances proposed.

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes ☐✓
No ☐
Comments: Automist is an emerging technology that shows promise but is comparitively unproven. It may be more suceptible to interference in mist patterns by obstacles. Even when a BS or other suitable technical is produced the **outcomes** of operation need to be specified and the situations where it is appropriate rather than just technical details of pipe size, operating pressure and droplet projection etc.

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes ☐✓
No ☐
Comments: This is more controversial and difficult to decide. Regulation of maintenance of equipment in peoples' homes is challenging particularly in owner occupied dwellings. The likelihood of catastrophic failure of sprinklers due to lack of maintenance and a fire resulting in casualties is likely to be low. However, there is a potential for legal action in these circumstances for example manslaughter due to negligence or a civil claim. Likewise, interference such as turning the system off could be considered as criminal damage or reckless life threatening behaviour in some circumstances. There is an analagy to the requirement for landlords to service gas appliances annually and similar arrangements could be put in place. Enforcement should only be considered after a serious incident that either caused fatalities, injuries or was a very close near miss.

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes ☑✓
No ☐
Comments: This is a good idea regardless of whether maintenace is made compulsory. It may be worth exploring options for reducing costs by promoting economies of scale such as a community maintenance period in a housing estate or block of flats

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes ☑✓
No ☐
Comments:

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[51] remain relevant given the proposals covered by the new legislation?

Yes ☑✓
No ☐
Comments:

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes ☑✓
No ☐
Comments:

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes ☑✓
No ☐
Comments:

[51] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes ☐✓
No ☐
Comments:

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes ☐✓
No ☐
Comments:

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

142-17935 - Newport City Council Building Control

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: Nicholas Alferi

Organisation (if applicable): Building Control, Newport City Council

email / telephone number:

Your address:

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes ☐
No ☒
Comments: The cost-benefit clearly shows that it is not a cost-effective solution in relation to single occupancy houses, shared houses, hostels and sheltered houses. While the decision has been made based upon preventing fire- related deaths and injuries in the home in Wales, there are serious economic implications of introducing this measure for single dwellings in terms of delivering housing stock, ensuring schemes are viable and affordable. The delivery of housing, including affordable housing, and the associated construction employment are key Welsh Government priorities.

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes ☐
No ☒
Comments: Single dwellings should not be included in the proposals.

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes ☒
No ☐

Comments: BS 9251 is the standard for Domestic sprinkler systems and appropriate for the range of residences proposed.

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes ☒
No ☐
Comments: The guidance should retain flexibility to other fire suppression systems depending on the risk and accommodation type.

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes ☒
No ☐
Comments: Building Control has no enforcement powers requiring maintenance of systems installed in buildings. However, a record of maintenance of suppression systems could be considered by Insurance Companies as a condition of insurance at a properties policy renewal date and residences with suppression systems could be kept on a central database to be accessed by Insurance Companies. However, this will add further potential burden to house occupiers, and will likely form a reason for companies to decline to pay out on claims if this record has not been kept.

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes ☒
No ☐
Comments: If the measure is introduced, a guide should be produced. Due to suppression systems being new to householders, most will be unfamiliar with the operation and maintenance requirements. It is therefore considered important to provide clear guidance.

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes ☐
No ☒
Comments: The proposed time of when the regulation comes into force (Spring 2014) is inadequate to allow for training to cope with the housing demand. There are too few companies in Wales to meet the demand for

sprinklers created by the proposals. Due to the financial implications of installing fire sprinkler systems, it would be prudent to wait until the economy has recovered before introducing this measure.

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[52] remain relevant given the proposals covered by the new legislation?

Yes ☒
No ☐
Comments: These standards are supported by BAFSA (British Automatic Fire Sprinkler Association) which should lead to stronger engagement with Education establishments in Wales to develop competent installers.

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes ☐
No ☒
Comments: The training provision needs to encapsulate the requirements for the installer and designers of suppression systems to become familiar with. Also the training should consider the proposed amendments to the Approved Documents Part B Volumes 1 and 2

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes ☐
No ☒
Comments: The proposal is not supported for the reasons given above and not all of the property types listed in paragraph 2.2 should be included. However, if the Welsh Government decides to proceed with the measure as set out in the consultation, the proposed changes to the Approved Documents are clear and understandable.

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes ☒

[52] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

No ☐
Comments: The cost benefit analysis has been carried out by the BRE(Building Research Establishment), whom have considered various options.

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes ☐
No ☒
Comments: The RIA does not make it clear where the burden lies or benefits are seen, for example the initial financial burden is met by house-builders / developers and so will be passed onto the purchaser. Financial savings associated by reduced death and injury will be seen by the fire service and NHS. Increased costs associated with future maintenance of the sprinkler system will be met by the occupier/owner.

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

- The introduction of the Measure in Wales in this current economic climate may be detrimental to the volume House builders and SME's. There is a potential risk of house builders relocating their sites to England.
- Housebuilders are objecting to the proposals on the basis of the cost implications, which they claim when combined with other legislative changes would adversely affect the viability of sites throughout Wales and result in them stopping investment in areas of marginal viability. This would have indirect financial implications for the Council by way of reduced planning application fee income, building control application fee income, reduced construction sector jobs, increased housing need and reduced growth.
- The cost benefit analysis takes into account the one-off costs of installing sprinkler systems in new-build homes and conversions and also considers the monetary value attributed to the reduced risk to life. Sprinkler systems may require a water tank (depending on local water pressure) and pump in order to operate, and on-going maintenance will incur costs for future occupiers. Taking these issues into account, the cost benefit analysis concludes that the introduction of sprinkler systems will not be cost-effective in private houses but will be cost-effective in care homes and student halls/dormitories. Installation costs will be incurred at the time of build by the developer and so will either be passed directly onto buyers, increasing house prices, or by reducing other costs, such as design savings or reduced S106 contributions due to the impact of higher build costs on viability. Installation costs are estimated as £2000 per house, £10,700 for a care home or £64,000 for a student hall/dormitory. The cost benefit analysis carried out clearly states that the proposal is not cost-effective for dwellings.

- It should be noted that the proposals would not just affect new-build development but would also affect conversions, for example the conversion of the upper floors of properties within the city centre into residential use. This is a clear priority for the Council in terms of increasing city centre footfall, and such schemes are already of limited viability.
- The Measure will encourage safe and sustainable buildings and reduce the burden upon the Fire and Rescue Services and alleviate any damage and subsequent repair caused by extinguishing fires. The measure will help address the emotional trauma on families affected by fire.
- To lessen the burden upon the NHS, domiciliary care will result in more elderly being cared for at home. So the introduction of this measure will further help address the subsequent difficulty of elderly people escaping premises in the event of a fire.

145-17935 - NHBC

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: Diane Marshall

Organisation (if applicable): NHBC

email / telephone number:

Your address:

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes ☒
No ☐
Comments:

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes ☐
No ☒
Comments: NHBC would make the following comments in respect of the proposed list of residences to which the regulations would apply –
1. Why are Schools (used for accommodation) excluded from the provisions but a children's residential home included. They are broadly similar uses and in NHBC's view of similar risk profile.
2. It is unclear from the table if the regulations would apply to Sheltered Housing.
3. There is still some confusion in respect of Apart-Hotels which combine self contained living accommodation in a short term hotel type arrangements. NHBC would encourage that a clear definition of Hotel be included in the amendments.
4. Many new dwellings which would be covered by the new regulations may be formed through the conversion of listed buildings. What would the status of the new regulations be if restrictions were placed on the installations of sprinklers by Listed Building Consent after consideration by the Local Planning Authority?

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes ☒
No ☐
Comments: NHBC agrees that this is the most applicable standard to the type of residences included in the proposed amendments.

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes ☐
No ☒
Comments: In NHBC's view, restricting installations to the use of systems only covered by a British Standard would be in breach of the provisions set out under Regulation 7, which provides several ways of establishing the fitness of materials and systems. NHBC would advise that other types of accreditation or justification also be allowed in line with Regulation 7 provided that the designer can provide suitable evidence illustrating that the same level of life safety can be afforded as a system installed in accordance with BS 9251.

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes ☒
No ☐
Comments: NHBC would encourage that all life safety measures be regularly maintained but agrees that there is no regulatory framework to require ongoing maintenance of any measures installed in a domestic residence once work has been satisfactorily signed off by a Building Control Body. NHBC would further comment that if provisions were to be made to require regular maintenance of fire suppression systems in dwellings these should not put any ongoing burden onto Building Control Bodies.

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes ☒
No ☐
Comments: NHBC supports the production of any information that informs householders of the importance of maintaining systems installed in their properties. However, NHBC would not support that the provision of this

information to the house owner becoming a further burden on BCB's or made a condition of issuing a final certificate.

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes ☒
No ☐
Comments: NHBC would request that the transitional arrangements are made clear and clearly state the conditions under which work planned or commenced will be affected by the implementation of the new regulations. The provisions should contain guidance on any periods of grace allowed, definitions on what commencement of work means and also the extent to which commencement will ensure that works are covered by previous regulations, i.e. all of the work on an Initial Notice or application to a Local Authority or just those plots started.

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[53] remain relevant given the proposals covered by the new legislation?

Yes ☒
No ☐
Comments: NHBC agrees that the suite of National Occupational Standards remains relevant. However, NHBC believes that the consultation misses a key issue that the installers of small domestic systems may not be qualified as Mechanical Fire Protection installers. We believe that the focus will need to be the upskilling of the existing plumbing contractors that home builders may use for domestic installations.

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes ☒
No ☐
Comments: The existing sources of training will remain fit for purpose and, in addition, NHBC would welcome the opportunity to work with the Welsh Government in developing and delivering training for BCB's and installers to ensure that the training infrastructure on offer is affordable, accessible and sustainable.

[53] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes ☐
No ☒
Comments: NHBC is unable to make comprehensive comments on the proposed changes to the Approved Documents for the following reasons –
1) The changes do not fully align with the Summary of significant changes to Approved Document B (Wales) included in the consultation package.
2) The proposed Approved Documents Volume 1 and 2 are not consistently edited and are not clear -
a) Page and paragraph numbers repeat and this makes it hard to cross reference and relate considerations to specific design conditions.
b) Only new text is highlighted. Where sections have been moved or deleted, these are not clearly marked, making it difficult to understand what has changed and any implications that these may have.

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes ☐
No ☐
Comments: NHBC has no expertise in this area however we would assume that it is reasonable to expect some ongoing maintenance of installed systems will take place. Should an allowance for this be made in the Regulatory Impact Assessment?

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes ☐
No ☐
Comments: NHBC has no expertise in this area

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

NHBC would make the following additional comments –
1) Although the Welsh Government have acknowledged that there will be an increase in costs to the industry in implementing the measure, it is also crucial to recognise the weakness of the Wales market and the severe under supply

of new homes. Additional costs to the sector through these regulations will have negative implications on construction levels in Wales.
2) It is unclear in the proposals, what levels of assurances Building Control Bodies would be able to accept in order to satisfy themselves that the requirements of the legislation have been met. NHBC would recommend that a Building Control Body be able to accept a commissioning certificate from a UKAS accredited installer as evidence that the system has been designed, installed and commissioned to the stated standard. This would encourage builders and developers to appoint designers and installers with the appropriate skills and ensure that standards are maintained.
3) The consultation does not include the proposed wording of the regulation that would be made to require the provision of domestic sprinklers to residences covered by the consultation.
a) NHBC would encourage the Welsh Government to consult industry further on the proposed wording of the specific regulation.
b) NHBC are keen to emphasise that no additional burdens be placed on Building Control Bodies by extending the scope of Regulation 38 of the Building Regulations 2010 to cover domestic residences.

146-17935 - Residential Landlords Association

RESIDENTIAL LANDLORDS ASSOCIATION RESPONSE; WELSH GOVERNMENT-CONSULTATION DOCUMENT-IMPLEMENTING THE DOMESTIC FIRE SAFETY (WALES) MEASURE 2011

About the Residential Landlords Association

1. The Residential Landlords Association (RLA) is a national landlords association operating in England and Wales. We have over 16,000 members. Our members own or control over 150000 units of accommodation. Primarily our members are landlords in their own right but a number are managing and letting agents, some of whom are also landlords. Our members operate in all sub-sectors of the Private Rented Sector (PRS). Properties are rented out to families, working people, young professionals, the elderly, students and benefit customers.

Introduction

2. Private landlords are tired of being accused, unfairly, of pushing up rents. In the long run this proposal will do just that. At the heart of this issue, is the lack of supply of new homes (including conversions) and their cost. The number of new housing starts is less than half of that required. In terms of supply the PRS and the owner/occupier sector are inextricably linked. Rising house prices are reflected in increasing rents. There are also now complaints about the lack of supply of new affordable homes in the social sector. We have a housing supply crisis at a time of economic crisis, with falling real wage levels. Relative to earnings, the ratio that you have to borrow to buy any house is still too high compared to the historic average. As a proportion more earnings are having to be spent on housing costs, whether they be mortgage repayments or rent. Indeed, there is a respectable view among economists that house prices ought to fall.

3. It is important to make these points in opening, because the proposed implementation of this measure will be a contributor to this problem. It cannot and must not be looked at in isolation because it links in with other measures which are already in force or are in the pipeline, which, in combination, mean that it is increasingly no longer economic to build new homes, especially, create new homes by conversion. Wales has rightly been criticised for having "totemic" building regulations and this proposed measure will add another costly layer to these regulations.

4. Like everyone else, we would like to see the number of fire deaths and injuries and related property damage reduced. Who wouldn't? Arguments in favour of increased fire prevention measures are often put in "emotive" terms and those who question these measures, especially in hard economic terms, open themselves to criticism. Nevertheless, it is important not to shirk from taking a very critical view of what is now proposed.

The danger of destroying the house building industry in Wales

5. In the United Kingdom, fortunately, we do not operate a Soviet style command economy. Unfortunately, our legislators seem to forget that providers, such as house builders, and private landlords, are not compelled to be in business and will either stop, reduce or re-configure of their business activities if they become unprofitable. House builders, such as Redrow, are already saying it is more advantageous to them to build in England rather than Wales. Redrow are criticised for doing so but they are simply issuing a wakeup call because, rightly, there are looking after their own business interests. Furthermore, no thought at all seems to have been given the regressive nature of this proposal. There is a great deal of concern about hard pressed workers being unable to buy their own homes; obviously at the cheaper end of the market. When you look at all the big house builders' annual reports and results, what you see is that they are "going up market". They are

concentrating on the high end of the market which is clearly more profitable. This proposed measure will accelerate this trend because as a proportion of the overall price the cost of a sprinkler system (and associated pump and tank which will be required) is going to be lower than in the case of a new home at the cheaper end of the market.

6. We strongly believe that the consequence of the implementation of this proposal and other measures will be to either destroy or at least severely damage house building and conversions in Wales; certainly outside the more expensive areas. Much of Wales' will become a "house building desert ". There is simply no point in building a house which is ultra safe to live in but no-one can afford to buy it.

7. In connection with the previous consultation relating to proposed amendments to Part L of the Building Regulations in Wales, we prepared and submitted calculations regarding the cost of the build, taking into account the fire sprinkler proposal. It is important to note that the estimated cost of installation has, in fact, increased since then and we are now talking of around £3,500 on a house; as against the former figure that was nearer £3,000. Based on the calculations we undertook it was simply not viable to build a semi – detached house in much of Wales.

8. In other words, this is not simply conjecture on our part, but based on hard evidence as to the impact and the cost of a normal modest semi-detached home. Importantly, you must not and cannot look at this in isolation. We are now on course for requirements to build "new zero carbon homes". Yet more cost. Just how long do we have to go on until politicians wake up to economic realities. Unfortunately, it seems that only a cessation of new build starts will bring people to their senses. As we demonstrate below, it is not as if this measure is actually needed but it is driven by an unachievable goal of absolute safety.

The role of the Private Rented Sector

9. Some private landlords do purchase new properties to rent out. The majority do not because there is, in effect, a “premium price” because the property is new. On the other hand, private landlords play an absolutely vital role in the overall housing market. They often buy up older properties that owner occupiers no longer want. These are then rented out. They therefore help lubricate the market and complete the house buying chain.

10. Importantly, what private landlords do and do very well is to convert properties, so long as it is economically viable. Old non residential accommodation may be converted to flats, for example. Shared housing is provided for young professionals and students etc. Traditional HMOs are mainly in the private rented sector and have been provided by conversions. This is an important source of housing, especially for single people as well as couples.

11. Increasingly, the PRS is providing housing for the less well off. This results from the reduced availability of social housing, including new social housing, as well as the consequences of the current economic situation. This means that many people, especially young people, who would otherwise become owner occupiers, have to rent because they cannot afford mortgage repayments or cannot find a mortgage due to more onerous mortgage criteria. Higher deposits are a particular problem. To meet this increased demand there needs to be an across the board increase in housing supply, with household sizes which are growing smaller, and increased migration, and an aging population, many of whom remain in their under occupied homes.

12. We are particularly disappointed that the Consultation, especially the Impact Assessment, fails to address the issue of conversion of properties at all. Inevitably, retro fitting is involved which can be significantly more expensive. There are also often practical difficulties which result e.g. where to locate the pump and tank. The existing water piping may be inadequate for the extra demand on it.

All of this adds to the cost but none of these issues are even thought about in the Consultation paper.

13. Conversions pose particular problems. As a result of changes to building regulations which have already been implemented, there are much higher requirements both in relation to heat loss and insulation and noise and sound insulation. Applying these retrospectively to existing buildings is difficult and costly. This already adds significantly to the price of the conversion and the requirement to install fire sprinklers will further exacerbate this problem. Already many developers take the view that it is simply not worthwhile to carry out conversions. We will therefore be left with a stock of ageing redundant buildings which could be used to provide new homes but simply stand idle. Indeed, one may find a growth in demolitions or the vandalising of these properties because it is not viable to put them to an alternative residential use.

The impact on social housing

14. The policy of the Welsh Government is to expand social housing if it can. Beside trying to put an end to house building in the private sector in Wales, the Government is intent on scoring an "own goal" when it comes to its much trumpeted policy of expanding social housing. The section "estimated impact on land values" at pages 14 and 15 of the Impact Assessment reveal the truth about what is going to happen to the new social housing provision in Wales as a result of this measure. The only way you can make this stack up is to reduce the requirements for the provision of affordable homes under Section 106 obligations. It is said that even then "in practice a lower developer return combined with a reduction in land value may be required to provide a level of affordable housing". So in return, by putting in a system which is simply not needed in fire safety terms and which in the case of ordinary housing is not economically justified (as set out in the Building Research Establishment Report) the Welsh Government wants to deprive its

citizens of the opportunity to obtain social housing, even though the waiting list for this type of accommodation are lengthening all the time. The Government's aspirations for a lower developer return and a reduction in land values are, in themselves, "pie in the sky". We have already made the point that house builders are looking for higher margins; not lower margins and are going upmarket to achieve these. What land owner is going to bring land forward for development, even if they can get planning permission. In many areas of Wales we are already in negative land value territory. On top of this we have had the Community Infrastructure Levy which his also going to adversely impact on land values. As we say, all of this for increased fire safety measures which are not even needed as we demonstrate below. This section of the Impact Assessment ends up by relaying the cheerful news to many aspirants for social housing .. "developers have already negotiated lower levels of affordable housing than required by local authorities". Since the provision of affordable housing it is one of the key ways in which affordable homes are meant to be provided, we are hardly likely to see much new provision of social housing in that way in future.

The impact on house prices and rents

15. Due to the increased cost of building, the proposal will push up overall house prices and in consequence rents across the whole private housing market. Rent levels are linked to house prices and both owners/occupiers and private landlords purchase properties from the same pool of stock. New house prices, dependant on the cost of new build, feed through into higher prices in the market generally.
16. Rents will follow on so the whole private housing market will pay an additional cost for this measure which grossly over eggs fire precautions just for a relatively few properties.

This fire safety measure is not needed

17. One of the many worrying aspects of this Consultation is the revelation in the Impact Assessment that it is not possible to distinguish between fire deaths and injuries in new properties - say up to 10 years old, as against the older stock. There is, however, an acknowledgment of the significance of the recent requirement for hard wired alarm systems in new build properties. Building regulation requirements also impose specific requirements as regards fire spread and other precautionary measures. Common sense therefore dictates that relatively speaking a new home is likely to be safely than an older one. Also importantly in the case of flats, 1991 and later Building Regulations have placed increased importance on compartmentalisation when it comes to new construction which, in turn, will have reduced the likelihood of the spread of a fire. Therefore, we believe that it is fair to assume that this measure is concentrating on a segment of building stock which is already better protected and therefore it follows where you are less likely to experience fire related death of injury. As we demonstrate below, this is therefore the wrong place to devote significant resources to provide much higher standards when you can, in fact, achieve a reduction in fire deaths and injuries by concentrating effort more on the existing stock, which is numerically much greater in size, than the new build segment of the market (especially with the reduced level of housing starts anyway).

18. Even more significantly, is the undoubted fact that this measure is being introduced to deal with a diminishing problem; not an increasing problem. So much so that the Welsh Government has had to massage the statistics to try to bolster its case. Even with these massaged statistics the BRE report demonstrates that the proposal is not cost effective other than in less common but more complex housing types. The recent report by Sir Fred Knights on the Fire Service has highlighted the reduction in fires. What the Welsh Government has done is to take the 10 year average and try to hide the steady downward trend. In the past we have discussed

the trend in fire statistics with the Statistician in England responsible for their production who repeatedly stressed the downward trend to us. This is apparent if you look at the last three years for which the statistics on fire deaths and injuries by year have been prepared namely 2009/10, 2010/11 and 2011/12. These are as follows:-

	2009/10	2010/11	2011/12
Death	18	20	13
Injury	195	220	180

19. Whilst it does not alter the level of deaths in the impact assessment (17) this reduces the number of injuries to 40% of that by reference to which the Impact Assessment has been prepared (503). As the Impact Assessment is heavily skewed towards deaths (a figure of £1.65 million per life lost as against approximately £20,000 per injury) what it does nevertheless demonstrate is that the actual problem has reduced significantly, as highlighted by the Knights report.
20. Therefore, the Welsh Government are seeking to deal with a problem which is fortunately reducing not increasing in extent. When you consider why ,this is clear. A reduction in smoking; less use of chip pans which cause kitchen fires; better electrical safety with things such as RCDs becoming standard and so on.
21. Thus, not only are the Welsh Government seeking to tackle a problem which is reducing anyway but they are also tackling the segment of the market where domestic fires are least likely to occur anyway.

The real problem

22. What the Welsh Government are trying to do is to achieve a platinum standard of properties that really do not need it but

neglecting to realise that we have not even achieved a bronze standard for many existing properties. The latest Welsh National Fire Statistics relating to the operation of smoke alarms where fires have occurred in dwellings are revealing. For the latest year for which statistics are published, out of a total of 2,013 incidents involving dwellings, it was found that in the case of 664 of these dwellings a smoke alarm was absence. In other words around a third did not even have a basic smoke detector, the kind that you can buy for £5 or so in hardware stores. The contrast cannot be greater. Clearly, properties which have been built more recently, will have a hard wired fire alarm system fitted at the time of construction so this lends weight to our argument that the problem does not lie with the more newly built properties; but with the older existing stock, across private sector dwellings. The statistics also identify 316 cases were the alarm was not activated which is also worrying for the prospect of there being on-going maintenance of equipment when we come onto that item. If the Welsh Government really want to reduce the number of injury and deaths then this is the area to concentrate on. It is no good, as the BRE impact assessment suggests, saying that voluntary uptake has plateaued. Clearly, the compulsory introduction of fire sprinklers in the segment of the market where they are at least needed is not going to address the problem of where they are most needed.

23. The data employed in Appendix H of the BRE assessment relating to smoke detectors does not seem to tie in with an analysis of the fire statistics. It proceeds on the assumption that the fraction of households with at least one working smoke alarm is 85%. It does, however make the important point that 15% of households without a smoke alarm have 41% of reported fires. Whilst dwelling fire deaths do not seem to vary too greatly depending on the presence or absence of smoke alarms, it is clear that it does make a noticeable difference so far as the level of injuries are concerned. Appendix H is, of course, based on UK fire statistics; rather than the Welsh specific statistics so perhaps the number of smoke alarms in

Wales is below the UK wide average. Again, this suggests that simpler more straight forward ways of reducing deaths and injuries are available. These, in fact, provide much greater value in cost benefit terms.

24. Clearly, prevention is better than cure and there are a number of features in the existing dwelling stock which could also be addressed, such as the presence of old domestic appliances, e.g. a refrigerators. This has recently been highlighted as a growing concern by the Fire Service as it has led to an increasing number of fires. Likewise, older electrical circuits which need rewiring is a contributory factor. These sort of factors are less likely to be present in newer dwellings.

25. There might be an argument to go down the route of sprinklers in new housing if there were to be a quick turnover which could rapidly lead to existing dwellings being replaced with modern dwellings equipped with sprinklers. This is most certainly not going to be the case. Leaving aside any need for extra dwellings to meet increased population/demand, at the Welsh Government's projected new build rate of 6,000 per annum, it would take 230 years to replace the current dwelling stock of around 1.38 million in Wales. In that time, on a life expectancy of, say, 40 year for systems , some of the earlier properties will have had to have gone through five replacement systems when systems become life expired. Again, once the initial system becomes life expired, how many will bother to replace the system anyway? This is therefore not a tenable strategy to upgrade the building stock; nor is it sustainable because there is absolutely no guarantee that life expired systems even where they have been installed will be replaced.

Maintenance

26. Interestingly, the Impact Assessment has been prepared on the footing that all systems will be fully maintained. This needs to be done professionally. The estimated cost per annum is just short of

£100 at current prices. Unfortunately, this expectation is a departure from reality. Recent research on behalf of Shelter (which is in line with our own anecdotal experience) is that in the private rented sector around 90% of gas appliances and installations are checked annually as required by law. The requirement for gas safety checks is well known and is in relative terms inexpensive. We all know that owner occupiers do not have their gas appliances regularly checked. The problem with sprinkler systems is that they are essentially out of sight and out of mind. They only come to the fore probably once in a lifetime when they are most needed. If at that stage they are not in working order then they are useless but in the meantime could, in fact, induce a false sense of security which, in turn, can be dangerous.

27. It is appreciated that Section 1 of the Measure will provide that the system is to operate effectively, it does not follow that the requirement will be effectively enforced. This will be, yet, another requirement that goes unenforced.

Accidental damage

28. The Consultation document fails to address this as an issue. As sprinkler heads are likely to be concealed, it is quite probable that over time they will be painted over and rendered useless. Also there is a significant risk over time of accidental damage e.g. Cutting through pipes . Systems will be of the wet pipe type so that water will be continuously present. The risk of accidental damage or poor maintenance of systems causing escapes is of particular concern; accidental activation is probably not as much of a problem, contrary to popular myth.

Water pressure

29. The need to install a tank and pump clearly adds to the cost but is regrettably unavoidable in many areas, because of potential water

supply problems. We would, however, urge that where a developer demonstrated that no such problems exist, that there can be a direct mains connection without the necessity for a tank and pump.

Compensating reductions in requirements

30. One issue not addressed in the Consultation paper, is the possibility of compensating reductions in requirements under the building regulations in view of the installation of a fire sprinkler system. We have to say that in our conversations with the fire authorities, particularly the West Yorkshire Fire Service, the Fire Service seems very reluctant to concede that any reductions can be made in such requirements. This does seem to suggest that perhaps the Fire Service do not have the same level of confidence in these systems as is suggested in the Impact Assessment. If there were compensating reductions, this would, of course, help offset the cost. Table 5 at page 39 of the BRE assessment suggests a figure of 90% (plus or minus 4) reduction in deaths for houses and flats with perhaps around a two thirds reduction in the number of injuries. It is a concern to us that the Consultation does not address this issue as these figures would suggest that consideration ought to be given to this issue. Indeed, there is literature which suggests that a full set of precautions is not necessarily required .

Think again

31. We would urge the Welsh Government to think again. It is not too late. The reasons for introducing this Measure, at least in respect of all types of residential accommodation, have simply not been justified on the evidence. In particular, the BRE say that it is not cost effective. As an alternative the Welsh Government should seriously consider policy option 2 and only introduce the regulations in the case of those residential buildings where it is expected to be

cost effective. These are the most unusual and complex building types anyway.

32. In particular, we would urge the Welsh Government to reconsider whether the Measure should be introducing in relation to conversions. No consideration at all has been given to the additional costs involved with retro fitting. No thought has been given to the detailed issues involved, such as whether pipes can be concealed, which add to cost. There is a strong case for saying that buildings which could be reused to advantage will not be and larger buildings, such as large older houses, will no longer be converted into smaller units of accommodation. It is far easier to do these things "starting with a clean piece of paper" when involved with new build than when carrying out any conversion with all the difficulties and extra cost involved. These conversions already attract the need to comply with Part L requirements relating to insulation as well as sound insulation, and a number of other building regulation requirements. This measure will simply add to the cost unnecessarily, in our view. They will be upgraded anyway with other fire precautions.

33. Another related concern is the requirement to install a system simply because an extra habitable room is added to a property. We very much doubt that home owners will appreciate the significance of what is being proposed. This is, again, going to inhibit home owners as well as landlords such as our members, from extending properties, e.g. to meet the needs of an expanding family or to add useful extra accommodation. The cost involved of the extra work, especially with retro fitting involved, it is going to be wholly disproportionate.

34. No thought, at all, seems to have been given to the reduction in home extensions and improvements which will result as well as a reduction in the number of conversions which will be carried out. At a time when Wales is wanting to expand its work force, this seems to be yet another "own goal" on the part of the Government. The

construction industry is already severely distressed throughout the UK, although fortunately showing some slight signs of recovery, and measures of this kind will simply make the situation worse.

35. We would therefore urge the Welsh Government to reconsider whether a “Change of use” for the purposes of building regulations should operate as a trigger for the need to install a fire sprinkler system in the property concerned.

Question 1 No. We consider that the measure should not be implemented at all and that there is no need for this measure. Please see above for the detailed reasons.

Question 2 We urge that the measures, if implemented at all, should only be implemented in relation to Section 1(2)(a) of the Measure i.e. new build/construction. It should not be implemented in relation to conversions, subdivisions or amalgamations affecting existing residencies. Section 9(3) should allow for this to happen.

Question 3 Yes as this is the recognised standard for domestic systems.

Question 4 Yes. However, we are concerned that the Welsh Government has dismissed water mist systems. We recognise that in the case of gaseous fire suppression systems the technology is not at all well developed. However, as far as water mist systems are concerned, internationally these are recognised as appropriate for use in residential accommodation. They have the advantage of actually being able to put out the fire rather than simply control it/suppress it. They also cause less water damage. We have had discussions with West Yorkshire Fire Service in particular regarding such systems in the context of back to back properties which are quite prevalent in West Yorkshire. It was certainly the view of the West Yorkshire Fire Service that such systems could be appropriate.

We face a chicken and egg situation. Unless the development of this kind of system is encouraged no British standard will be forthcoming become it is the lack of experience which is inhibiting the production of an appropriate British standard. It is therefore important that this flexibility should be retained, in our view, as suggested.

Question 5 We agree that compulsory maintenance requirements are not appropriate. In our view it is simply not realistic to expect them to be carried out and, in any case, we seriously question the ability of local authorities, with cutbacks, to police such checks effectively.

Question 6 Clearly, proper education and guidance is necessary because of ongoing maintenance issues.

Question 7 No. The timetable is far too ambitious. The Impact Assessment comments on the existing low skill base. Much more preparatory work is needed. In any event, as pointed out in Question 1, we do not agree that the measures should be implemented and, if it is, it should be done in a much more restricted form excluding conversions, subdivisions and amalgamations of existing accommodation.

Question 8 We re not competent to comment on this aspect.

Question 9 Our view would be that additional skills are required and with the low existing knowledge base they may well not be sufficient for this purpose.

Question 10 No. This is because we do not agree with the necessity to implement the measure at all. If it is done it should be done in a much more restricted format confined to new build.

Question 11 No. We have grave concerns about the Impact Assessment which we consider to be wholly defective in a number of respects:-

- It fails to relate this measure to other measures both existing and in the pipeline which will also result in extra requirements.
- It fails to analyse the impact of the costs on new build.
- It fails to look at all at the issue of retro fitting involved with conversions relating to existing properties.
- It wrongly uses averages in relation to the number of deaths and significant injuries over the last 10 years and fails to acknowledge the continuing downward trend in fire related deaths and injuries in dwellings. This is very worrying. The level of injuries is grossly inflated.
- The assumption that 6000 new properties per annum will be built is questionable assumption. The assessment fails to consider the impact on the number of dwellings which will be built as a result of the implementation of the measure itself.
- The Impact Assessment fails to differentiate between fire deaths and injuries in new and recently built properties compared with the existing building stock. Again this is highly concerning.
- The Impact Assessment proceeds on the wholly false assumption that all systems will be fully maintained, especially when no legal requirement to do so.
- Flat costs have been based on an assumption of 32 unit blocks when many blocks have far less units and therefore the cost for these will be significantly greater
- No account has been taken of disbenefits which will result, particularly the reduction in new build

- Following on, no account has been taken of the reduction in the provision of new social housing by a Section 106 obligation.

The Impact Assessment is shot through with holes but even then because of the BRE research it demonstrates that implementation across residential accommodation is not cost effective.

Question 12 No. Throughout our response we have identified various risks and issues associated with the proposed Regulations which have not been properly addressed. Please also see answer to previous question. Issues not addressed also include:-

- Upward pressure on house prices and PRS rents.
- Adverse impact on construction industry.
- Adverse consequences for social housing provision.
- Adverse consequences for house building.
- Regressive nature of proposal which could lead to increased higher end house building as opposed to lower cost market housing.
- Positive aspects such as any improvement on levels of insurance premiums.

Additional comments

36. We have set out a number of additional comments at length in our initial statement above.

Conclusion

37. This proposal is potentially hugely damaging to the Welsh Housing Sector and the wider economy. It will not achieve the advantages suggested. It has been questioned in many quarters. The Government needs to think again in our view.

147-17935 - Cambridgeshire Fire and Rescue Service (Steve Cotton)

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: Group Commander Stephen Cotton

Organisation (if applicable): Cambridgeshire Fire & Rescue Service

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes √

Comments:

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes √

Comments:

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes √

Comments: Even with the current limitations around the use of BS9251, such as height of building and duration of discharge, this is the most suitable standard given what is intended for domestic fire safety.

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes √

Comments: This proposal is about achieving higher levels of domestic fire safety so other fire suppression systems should be considered if they can achieve the same outcomes.

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes √

Comments: In certain premises maintenance is likely to be part of arrangements in place alongside other systems such as central heating e.g. student accommodation or residential care home. Should fire suppression systems be used as mitigation to relax a requirement for fire safety as per building regulations, then there would be a need to maintain them which is likely to fall under the Fire Safety Order 2005 as part of the fire strategy in most situations other than dwelling of perhaps flats. Education of occupants of the latter premises type is the better option to encourage regular maintenance.

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes √
No
Comments: See above

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes √

Comments:

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[54] remain relevant given the proposals covered by the new legislation?

Yes √

Comments: Any fire safety measure, whether passive or active, is only as good as its standard of installation (and ongoing maintenance!) so nationally agreed standards will be important.

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes ?
No ?
Comments: Unsure as to what is in place currently so difficult to comment either way other than to say that training facilities to the approved/recognised standard should meet the demand of installation.

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes √

Comments:

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes ?
No ?

Comments: The cost benefit analysis touches on other factors in 3.6 on page 25 – we feel these could be significant both on the real cost benefit of sprinklers/suppression systems and the cost of dealing with future fires by the Fire Service in addition to providing safer fire fighting with less resources. Will market forces and demand/rise in expectations of consumer/customers of new housing have a notable effect on costs as it does with the provision of other goods and services? Potentially bringing costs down further?

[54] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

No √

Comments: Impact on existing dwellings not covered (presumably as the 'Measure' only covers new premises). Could there be a take up around 'retrofit' of suppressions systems as a result of the 'Measure' being introduced and implemented?

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

148-17935 - Humberside Fire and Rescue Service (Chris Blacksell)

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: Chris Blacksell

Organisation (if applicable): Humberside Fire and Rescue Service

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes ☐ Yes
No ☐
Comments: I think it is entirely appropriate and will make people living in, and visiting, Wales safer as a result

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes ☐ Yes
No ☐
Comments:

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes ☐ Yes
No ☐
Comments:

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes ☐ Yes
No ☐
Comments:

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes ☐ Yes
No ☐
Comments: Regulation would not be necessary

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes ☐ Yes
No ☐
Comments:

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes ☐ Yes
No ☐
Comments:

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[55] remain relevant given the proposals covered by the new legislation?

Yes ☐ Yes
No ☐
Comments: And of course they are regularly reviewed in any case.

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes ☐ Yes

[55] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

No ☐
Comments:

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes ☐ Yes
No ☐
Comments:

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes ☐
No ☐ No
Comments: The findings that the fitting of them is not cost effective mirrors previous views on sprinklers in high rise buildings and is based on data which the report itself acknowledges is “subject to uncertainty” The actual figures regarding high rise systems installed since at places such as Callow Mount in Yorkshire showed that it was much more cost effective than anticipated and I expect that this would be the case regarding all dwelling homes as the competition and the market would likely force down the cost of the systems themselves. It is also likely that the systems will last beyond their quoted 40 – 50 years lifespan as there is very little which would need maintenance.

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes ☐ Yes
No ☐
Comments:

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

149-17935 - Federation of Master Builders

Consultation Response

11/6/2013

Implementing the Domestic Fire Safety (Wales) Measure

Please find below our answers to the questions within the consultation proposals. We have also included a separate section at the end titled 'other issues'.

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the intent of the Measure through a combination of commencing section 1 of the Measure and making changes to the Building Regulations?

No.

The overall policy objective

There is, manifestly, a need to reduce or eradicate the number of fire deaths in Wales and FMB Cymru appreciates and supports the overall policy objective to reduce fire deaths in Wales. However, the solution the policy objective proposes is to achieve a reduction in fire deaths and address the issue through new build and converted dwellings only. Our understanding is that the main instances of fire deaths in Wales occur in older properties that have not been maintained well. It appears that a majority of deaths are caused by a particular failure to maintain battery powered smoke or fire alarms. Given this appreciation of the problem it is not clear to us how the proposed legislation will cause other than a minimum reduction in the dreadful loss of life. It is not at all clear that the legislation in its current from will achieve its aim.

Partners have introduced evidence, we understand, (informed by South Wales Fire and Rescue) that in South Wales, a vast majority of all deaths recorded from house fires between the years 2000 and 2009 were recorded in homes without hard-wired smoke detectors installed. In this respect, given that since 1992 the mandatory

installation of hard-wired smoke detectors in all new homes in Wales has been enforced through building regulations, the evidence potentially demonstrates that the vast majority of all deaths from fire within this period came from homes built pre 1992.

Evidence given to the legislative Committee

[33] ***Val Lloyd:*** *The committee has received evidence questioning whether the statistics provided in the explanatory memorandum, which relate to death and injuries from fire in all dwellings in Wales, are*

[34] 'sufficiently focussed to accurately assess the benefit of the proposed Measure'.

[35] Of the figures provided in paragraphs 3.8 and 3.9 of the explanatory memorandum, can you clarify how many of the fires occurred in newly built homes and how many were in older housing stock? Secondly, can you also provide details of the types of dwellings within which the fires occurred; for example, house, flat or caravan?

[38] ***Ann Jones:*** *I have been unable to get hard figures but we are working on that. I will try to get some figures that break down the number of deaths and injuries in new properties, as opposed to deaths and injuries in older properties. I will try to do so during the course of your scrutiny of this proposed Measure. I do not know whether you, as a committee, could write to Communities and Local Government to ask whether the figures are easily collected, because we do not want to put an awful lot of burden on overworked staff within the fire service.*

[39] ***Rosemary Butler:*** *If you could find those figures, Ann, and submit them in written evidence that would be helpful. We will also make some inquiries…*

Following this, at Ms Jones' final evidence session on the 14th October 2010 the following conversation took place on this issue:

[8] ***Rosemary Butler:*** *When you last gave evidence, you advised the committee that you would try to provide a breakdown of the total number of deaths and fires in homes in Wales by the age and type of property. Are you now able to provide this information?*

[9] ***Ann Jones:*** *Sadly, no, though it is not for the want of trying. Apparently, the data are not collated in a fashion that would make them available to the committee. I spoke to my local fire service in north Wales and said that, if it could provide me with a list of property fires over the last 10 years, I would attempt to go around and check*

how old the buildings were. I could do that only in Rhyl and Prestatyn, I suppose, so the exercise would easily outweigh the data.

As the above shows, the evidence given to the Legislative Committee was not at all robust; we consider that the Welsh Government should undertake further research, in order to ensure that any new legislation enacted would actually achieve the overall objective. This research should be particularly directed to measuring the relative value of retro fitting hard wired smoke alarms to all properties.

The FMB is concerned that data used in the WG argument uses the data for all fire deaths, to identify how many lives might be saved and injuries prevented if sprinklers are installed in all new dwellings. The argument uses the total fire deaths in all homes that have occurred in Wales and the Impact Assessment is based exclusively on the Welsh Government's estimates of the number of new homes likely to be built in the future, the evidence plainly does not differentiate between the occurrences of fire that occur in newly built homes and those that occur in the existing stock. The issue is what can be done the save the majority of lives lost which would appear to be in older properties?

The Impact Assessment informs us, there will be around 35 lives saved if sprinklers are installed in new buildings. However, given these figures are based on the total fire deaths in all homes that have occurred in Wales. The evidence clearly does not distinguish between deaths from fire in new homes and those that in existing stock. This would appear to be a major flaw in the calculations that leads to a distorted depiction of the potential for lives saved by installing sprinklers in new homes.

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We can refer to the research given by our partners in the Welsh Construction Federation Alliance around the number of deaths and injuries that have occurred as a result of house fires in Wales. This research based directly on information provided to partners by all the Fire and Rescue Services in Wales. The have again used the presence of a hard wired smoke detector to establish whether or not a home would be a recently constructed property or part of the older existing stock. However, to be clear, hard wired smoke detectors were made mandatory in 1992, which means the properties that benefit from these devices could still be more than 20 years old. As such, when we say 'recently constructed home', it is important to remember that such properties could still be quite mature in comparison.

In terms of the above, according to our data, nearly 80% of all fire deaths in Mid, and West and South Wales between the years 2002 and 2012, occurred in homes without a hard wired smoke detector. Furthermore, more than half of injuries also occurred in homes without a hard wired smoke detector in South, Mid and West Wales. Please see the tables below for more information.

Data relating to South Wales						
YEAR	Deaths (hard wired smoke alarm)	Deaths (no hard wired smoke alarm)	Injuries (hard wired smoke alarm)	Injuries (no hard wired smoke alarm)	Fire related deaths in dwelling fires South Wales	Fire related injuries in dwelling fires South Wales
2002	0	10	23	95	10	118
2003	0	13	31	131	13	162
2004	4	4	29	87	8	116
2005	2	9	56	60	11	116
2006	0	3	22	45	3	67
2007	1	5	25	71	6	96
2008	2	7	42	32	9	74
2009	0	5	54	50	5	104
2010	0	2	65	68	2	133
2011	3	2	50	20	5	70
2012	5	1	47	45	6	92
TOTALS	**17**	**61**	**444**	**704**	**78**	**1148**
%	**22%**	**78%**	**39%**	**61%**		

Data relating to Mid and West Wales						
YEAR	Fire related deaths hard wired smoke alarm	Fire related deaths non-hard wired smoke alarm	Fire related injuries hard wired smoke alarm	Fire related injuries non-hard wired smoke alarm	Fire related deaths in dwelling fires Mid/West Wales	Fire related injuries in dwelling fires Mid/West Wales
2002	0	6	56	156	6	212
2003	2	6	81	135	8	216
2004	0	8	67	131	8	198

2005	1	5	50	108	6	158
2006	0	1	57	110	1	167
2007	0	5	75	69	5	144
2008	1	6	53	84	7	137
2009	4	5	86	47	9	133
2010	2	6	64	33	8	97
2011	4	2	104	22	6	126
2012	1	1	57	66	2	123
TOTALS	**15**	**51**	**750**	**961**	**66**	**1711**
%	**23%**	**77%**	**44%**	**56%**		

In this respect, if we assume that it is unlikely anyone would remove a hard wired smoke detector from a dwelling, it is reasonable to assume that these deaths occurred in homes built pre 1992. This therefore suggests that there are significantly more deaths occurring in the older existing stock than in newly built homes. This in turn suggests that installing fire sprinklers in newly built homes only, might not reduce these instances of death and injury in future years, given that the legislation will not cover the existing stock. Therefore, we believe the figures quoted for lives saved and injuries prevented as a result of the Preferred Option should be reconsidered, to ensure they are sound and robust. We also believe this evidence somewhat contradicts the comments made within the Impact Assessment (page 6), that the Committee received evidence that the Measure would possibly ***eradicate fire deaths in Wales***. In this respect, we are yet to see any evidence from the Welsh Government to corroborate this important statement and given our evidence above, we believe this seems to be a very dangerous and rather ill-considered commitment statement to offer Welsh Ministers.

In terms of North Wales, similar data is only recorded from 2010 onwards, and does not distinguish between hard wired and battery operated smoke alarms. However the figures are very similar to those witnessed in other areas of Wales. The table below sets the evidence out and demonstrates that over the period 2010 - 2012, roughly 73% of fire deaths and nearly half the total injuries occurred in properties without a smoke alarm fitted. Furthermore, as you can see from the table below, even though the percentage of fires that occurred in homes without smoke detectors was

relatively small, they still accounted for the vast majority of deaths from fire that occurred over this period.

Data relating to North Wales			
Year	**% Proportion of residential fires where no smoke alarm present**	**% Proportion of total deaths in fires with no smoke alarm**	**% Proportion of total injuries in fires with no smoke alarm**
2010	16.33	88.89	34.62
2011	14.71	50.00	48.84
2012	15.96	80.00	61.54
TOTALS	**15.6%**	**73%**	**49%**

In light of the evidence above, we believe it is imperative the Welsh Government tackles the important issue of the instances of fire that occur in newly built homes versus those that occur in the older existing stock. Not only is this important to ensure the impact assessment and cost benefit analysis are based on robust evidence, but it is also critical in order to ensure the proposed legislation will achieve the aims and objectives it sets out.

Further to the above, we believe it is also important for the Welsh Government to understand the type of property that has presented the most risk from fire. In this respect, the purpose of this consultation is to determine the type of properties that should be covered by the sprinklers legislation. Therefore, when considering the number of deaths and injuries that have previously occurred in homes in Wales, in addition to considering the age of the property, it also is important to understand whether or not there is a certain type of property that is more prone to the risks from fire.

In light of the above, we believe it is crucial for the Welsh Government to revisit these aspects of the Measure and to undertake its own research into these matters, in order to ensure the impact assessment accurately reflects the potential effectiveness of the stated preferred option.

The FMB has done a brief desk top survey of the costs of retrofitting smoke alarms to existing stock. This shows that installing a surface mounted hard wired smoke

detector [wiring not buried under surface] we can estimate a cost of around £250 a smoke detector. Individual house circumstances may cause fluctuations in this estimate. Providing the circuit breaker is not interfered with and the battery backup maintained, this may offer an opportunity to reduce fire deaths on a greater scale. Consideration to a heat sensitive alarm in the kitchen would be a similar cost, and these do not trigger from burnt toast. We understand that the two common causes of fire are from neglected chip pans, which would trigger heat, and cigarettes in bed, which should trigger a secondary detector. Given the average house is 2 storey; we estimate a cost of £500 a house? WE believe a study of this option and support for its implantation would have a far greater effect on loss of life in domestic fires than sprinklers in new

The FMB are of the opinion that not all the pertinent issues have been addressed adequately and the proposals need to be reconsidered to ensure these important matters are addressed.

In light of the above, despite the numerous potential flaws within the cost benefit analysis, the impact assessment, the creation of the Measure, the potential success of the measure and the viability analysis work, it would seem there is a substantial amount of evidence weighted against the adoption of the preferred option.

Richard Jenkins MSc.Dip.M
Director/Cyfarwyddwr FMB Cymru

151-17935 – Home Builders Federation

CONSULTATION RESPONSE

Implementing the Domestic Fire Safety (Wales) Measure 2011 **17/6/2013**

Please find below our answers to the questions within the consultation proposals. We have also included a separate section at the end titled 'other issues'.

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the intent of the Measure through a combination of commencing section 1 of the Measure and making changes to the Building Regulations?

No.

The overall policy objective

We have concerns with the solution to the problems identified within the section titled 'Overall Policy Objective' within Section 1 of the consultation documentation. We have re-listed some of the policy objectives below for clarity.

5. When the May 2012 statement was published, available data from the last 10 years showed that on average 17 deaths and 503 injuries per year have resulted from fires in residential properties in Wales.

6. The Welsh Government's view at that time was that, notwithstanding the reduction in the number of deaths from fires in the home that had occurred over the previous last ten years, the number of deaths and injuries was still too high.

7. The overall policy outcome we are seeking to achieve is to reduce deaths and injuries from fire in new and converted residential premises in Wales.

Further to the above objectives, paragraph 20 of the 'Section 1' consultation document states:-

20. The proposed approach is as follows:

To be clear about the purpose and intent of the Measure in driving forward our commitment to preventing fire-related death and injury in the home, and to set Wales apart as a leader in this, we propose to commence Section 1 of the Measure. This will

require that each residence (to which the Measure applies) must be provided with an automatic fire suppression system, that the system is operating effectively and that the fire suppression system complies with such requirements as may be prescribed by Welsh Ministers.

The HBF understands the overall policy objective to reduce fire deaths in Wales. In this respect, we agree that this is an important issue that needs to be properly addressed. However, it appears that the solution to the overall policy objective is to address this important issue by seeking to achieve a reduction in fire deaths in new and converted dwellings only. In this respect, given that the main issue to be addressed is the number of fire deaths in Wales in general, we believe it is imperative to establish whether or not the proposed legislation will be effective in achieving this aim.

We raised this issue when we responded to the original Measure issued by Ann Jones AM. Within our response to the Measure consultation, one of our primary concerns related to the role and remit of the Measure. In this respect, the stated purpose of the Measure was to reduce the incidences of death, injury and property loss from house fires in Wales. Therefore, given that the mandate of the Measure was solely focussed on installing fire suppression systems within newly built homes, we stated it was necessary to gather evidence on the instances of fire that occurred within the older existing stock and those that occurred within newly built homes, in order to establish whether or not the type and age of the property had any bearing on the level of risk presented. In doing so, we stated it was also important to consider the method of fire protection present within a property and also the particular type of property concerned (flat, house etc), to establish whether or not these factors had any impact on risk.

In order to support this, within our response to the Legislation Committee, we provided evidence (informed by South Wales Fire and Rescue) that in South Wales, a vast majority of all deaths recorded from house fires between the years 2000 and 2009 were recorded in homes without hard-wired smoke detectors installed. In this respect, given that since 1992 the mandatory installation of hard-wired smoke detectors in all new homes in Wales has been enforced through building regulations, the evidence potentially demonstrates that the vast majority of all deaths from fire within this period came from homes built pre 1992.

In light of the above, we stated within our evidence submission that in order to ensure the Measure effectively delivers the objectives it sets out, it is imperative that more work is done to identify the main source of the problem. That is, if we cannot clearly

identify whether or not it is newly built homes with improved fire safety measures installed (e.g. hard-wired smoke detectors), or the older stock without these improvements that is the main cause of the problem, it is impossible to tell whether or not the installation of fire suppression systems within all newly built homes would have the desired impact of reducing the instances of injuries or deaths from house fires in Wales, or the savings in terms of property damage and loss, as stated within the Measure.

In response to our concerns, at the first oral evidence session with regard to the Measure, Ms Jones AM indicated that she would attempt to find this information in order to address this important matter. The following transcript is taken from MS Jones's first evidence session to the Legislation Committee on Thursday, 23 September 2010[56].

[33] ***Val Lloyd:*** *The committee has received evidence questioning whether the statistics provided in the explanatory memorandum, which relate to death and injuries from fire in all dwellings in Wales, are*

[34] 'sufficiently focussed to accurately assess the benefit of the proposed Measure'.

[35] Of the figures provided in paragraphs 3.8 and 3.9 of the explanatory memorandum, can you clarify how many of the fires occurred in newly built homes and how many were in older housing stock? Secondly, can you also provide details of the types of dwellings within which the fires occurred; for example, house, flat or caravan?

[38] ***Ann Jones:*** *I have been unable to get hard figures but we are working on that. I will try to get some figures that break down the number of deaths and injuries in new properties, as opposed to deaths and injuries in older properties. I will try to do so during the course of your scrutiny of this proposed Measure. I do not know whether you, as a committee, could write to Communities and Local Government to ask whether the figures are easily collected, because we do not want to put an awful lot of burden on overworked staff within the fire service.*

[39] ***Rosemary Butler:*** *If you could find those figures, Ann, and submit them in written evidence that would be helpful. We will also make some inquiries…*

Following this, at Ms Jones' final evidence session on the 14th October 2010 the following conversation took place on this issue.

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[56] **Domestic Fire Satety (Wales) Measure – Legislation Committee Transcripts** http://www.assemblywales.org/bus-home/bus-legislation/bus-leg-measures/business-legislation-measures-domfiresafety.htm

[8] ***Rosemary Butler:*** *When you last gave evidence, you advised the committee that you would try to provide a breakdown of the total number of deaths and fires in homes in Wales by the age and type of property. Are you now able to provide this information?*

[9] ***Ann Jones:*** *Sadly, no, though it is not for the want of trying. Apparently, the data are not collated in a fashion that would make them available to the committee. I spoke to my local fire service in north Wales and said that, if it could provide me with a list of property fires over the last 10 years, I would attempt to go around and check how old the buildings were. I could do that only in Rhyl and Prestatyn, I suppose, so the exercise would easily outweigh the data.*

As the above demonstrates, this issue was recognised by the Legislative Committee but unfortunately robust evidence was never provided to answer these important questions. In light of this, we urged (and continue to urge) the Welsh Government to undertake this research, in order to ensure that any new legislation enacted would actually achieve the overall objectives it sets out.

Further to the above, it is evident from the current consultation proposals, that the Welsh Government has still not undertaken this important work. Indeed, the Impact Assessment of the preferred option (as set out within the consultation proposals) still uses the data for **total** fire deaths, injuries and property loss in order to identify how many lives might be saved and injuries prevented if sprinklers are installed in all **newly built** dwellings.

In this respect, the Impact Assessment states that there will be roughly 35 lives saved over the life of a sprinkler system and roughly 800 injuries prevented. However, given these figures are based on the **total** fire deaths and injuries in **all homes** that have occurred in Wales and the Impact Assessment is based solely on the Welsh Government's estimates of the number of **new** homes built in the future, the evidence clearly does not distinguish between the instances of fire that occur in newly built homes and those that occur in the existing stock. As such, this does not seem to be a fair comparison, that might not only lead to a distorted picture of the potential for lives saved and injuries prevented as a result of the preferred option, but could also impact significantly on the results of the cost benefit analysis.

In order to potentially achieve the figures for lives saved and injuries prevented (as discussed within the consultation information), it would seem that sprinklers would need to be install in **all homes** in Wales, rather than just newly built homes. We raised this issue again at the Fire Sprinklers Consultation event held in Cardiff on the 7th May

2013, where the authors of the impact assessment and cost benefit analysis fully accepted our concerns and recognised that more work will need to be done on this important issue.

In order to begin to understand the significance of this issue in a little more detail, it is possible to undertake a simple calculation in order to make a broad assumption of how the figures for lives saved and injuries prevented might be affected.

In this respect, if we accept that the new build market is roughly 5% of the total housing market, and we applied that figures above on lives saved and injuries prevented, it would suggest that roughly 1 life would be saved and 25 injuries prevented. However, this calculation still assumes that the older existing stock is equally as safe as newly built homes, which evidence suggests is not the case.

In terms of the above, this is a very rough calculation, which is by no means scientific and is certainly not meant to demean the saving of lives or the prevention of injuries in any way. Rather, we are simply making the point that the figures for lives saved and injuries prevented as provided within the consultation proposals seem to be rather inaccurate, as a result of the methodology by which they have been created. If incorrect figures are used in such assessments, this would not only distort the impact assessment and the cost benefit analysis, but might also send out a rather inaccurate message to the public on the potential impact of the proposed legislation.

In addition to the above, we have undertaken our own research on the number of deaths and injuries that have occurred as a result of house fires in Wales. To be clear, this research is based directly on information provided to us by the three Fire and Rescue Services in Wales. Through this research we have again used the presence of a hard wired smoke detector to establish whether or not a home would be a recently constructed property or part of the older existing stock. However, again to be clear, hard wired smoke detectors were made mandatory in 1992, which means the properties that benefit from these devices could still be more than 20 years old. As such, when we refer to a ‘recently constructed home’, it is important to remember that such properties could still be quite mature in comparison.

In terms of the above, according to our data, nearly 80% of all fire deaths in Mid Wales, West Wales and South Wales between the years 2002 and 2012, occurred in homes without a hard wired smoke detector. Furthermore, more than half of injuries also occurred in homes without a hard wired smoke detector in Mid, West and South Wales. Please see the tables below for more information.

Data relating to South Wales						
YEAR	Deaths (hard wired smoke alarm)	Deaths (no hard wired smoke alarm)	Injuries (hard wired smoke alarm)	Injuries (no hard wired smoke alarm)	Fire related deaths in dwelling fires South Wales	Fire related injuries in dwelling fires South Wales
2002	0	10	23	95	10	118
2003	0	13	31	131	13	162
2004	4	4	29	87	8	116
2005	2	9	56	60	11	116
2006	0	3	22	45	3	67
2007	1	5	25	71	6	96
2008	2	7	42	32	9	74
2009	0	5	54	50	5	104
2010	0	2	65	68	2	133
2011	3	2	50	20	5	70
2012	5	1	47	45	6	92
TOTALS	**17**	**61**	**444**	**704**	**78**	**1148**
%	**22%**	**78%**	**39%**	**61%**		

Data relating to Mid and West Wales						
YEAR	Fire related deaths hard wired smoke alarm	Fire related deaths non-hard wired smoke alarm	Fire related injuries hard wired smoke alarm	Fire related injuries non-hard wired smoke alarm	Fire related deaths in dwelling fires Mid/West Wales	Fire related injuries in dwelling fires Mid/West Wales
2002	0	6	56	156	6	212
2003	2	6	81	135	8	216
2004	0	8	67	131	8	198
2005	1	5	50	108	6	158
2006	0	1	57	110	1	167
2007	0	5	75	69	5	144
2008	1	6	53	84	7	137
2009	4	5	86	47	9	133
2010	2	6	64	33	8	97

2011	4	2	104	22	6	126
2012	1	1	57	66	2	123
TOTALS	**15**	**51**	**750**	**961**	**66**	**1711**
%	**23%**	**77%**	**44%**	**56%**		

In this respect, if we assume that it is unlikely anyone would remove a hard wired smoke detector from a dwelling, it is reasonable to assume that these deaths occurred in homes built pre 1992. This therefore suggests that there are significantly more deaths occurring in the older existing stock than in newly built homes. This in turn suggests that installing fire sprinklers in newly built homes only, might not reduce these instances of death and injury in future years, given that the legislation will not cover these particular dwellings. Therefore, we believe the figures quoted for lives saved and injuries prevented as a result of the preferred option should be reconsidered, to ensure they are sound and robust. We also believe this evidence somewhat contradicts the comments made within the Impact Assessment (page 6), that the Committee received evidence that the Measure would possibly ***eradicate fire deaths in Wales***. In this respect, we are yet to see any evidence from the Welsh Government to corroborate this significant statement and in light of our evidence above, we believe this seems to be a rather ill-considered commitment to offer Welsh Ministers.

In terms of North Wales, similar data is only recorded from 2010 onwards, and does not distinguish between hard wired and battery operated smoke alarms. However the figures are very similar to those witnessed in other areas of Wales. The table below sets the evidence out and demonstrates that over the period 2010 - 2012, roughly 73% of fire deaths and nearly half the total injuries occurred in properties without a smoke alarm fitted. Furthermore, as you can see from the table below, even though the percentage of fires that occurred in homes without smoke detectors was relatively small, they still accounted for the vast majority of deaths from fire that occurred over this period.

Data relating to North Wales			
Year	**% Proportion of residential**	**% Proportion of total deaths in**	**% Proportion of total injuries in**

	fires where no smoke alarm present	fires with no smoke alarm	fires with no smoke alarm
2010	16.33	88.89	34.62
2011	14.71	50.00	48.84
2012	15.96	80.00	61.54
TOTALS	**15.6%**	**73%**	**49%**

In light of the evidence above, we believe it is imperative the Welsh Government tackles the important issue of the instances of fire that occur in newly built homes versus those that occur in the older existing stock. Not only is this important to ensure the impact assessment and cost benefit analysis are based on robust evidence, but it is also critical in order to ensure the proposed legislation will achieve the aims and objectives it sets out.

Further to the above, when considering previous evidence on the instances of death and injury from fires in the home in Wales, we believe it is also important for the Welsh Government to understand the type of property in which these instances have occurred. In this respect, the purpose of this consultation is to determine the type of properties that should be covered by the sprinklers legislation. Therefore, when considering the number of deaths and injuries that have previously occurred in homes in Wales, in addition to considering the age of the property, it also is important to understand whether or not there is a certain type of property that is more prone to the risks from fire.

In light of the above, we believe it is crucial for the Welsh Government to revisit these aspects of the Measure and to undertake its own research into these matters, in order to ensure the impact assessment and the cost benefit analysis accurately reflects the potential effectiveness (or otherwise) of the stated preferred option. Again, we reiterate that the Welsh Government fully accepted that these important issues need to be addressed at the Fire Sprinklers Consultation event held in Cardiff on the 7th May 2013.

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

No.

Firstly, we believe it is important to note that the cost benefit analysis for 'houses' demonstrates a significant negative net present value. This would therefore seem to

demonstrate that the cost of installing fire sprinklers into this type of property would outweigh the benefits. As such, we cannot understand why the 'preferred option' includes this dwelling type.

We also do not believe the proposed list of residences has been considered properly. Paragraph 32 of Section 1 of the consultation information lists a number of establishments that could potentially pose a risk from fire, such as short term youth hostels and residential nursing homes. These establishments are likely to house a number of vulnerable groups of varying kinds under one roof, in addition to potentially large groups of people with limited mobility. As such, we believe the measure should be reconsidered to take account of these establishments.

Also, it is not clear whether or not the instances of death and injury from fire recorded in the consultation information and subsequently included within the impact assessment, arise from any of these establishments. This, we believe, needs to be clarified to ensure the potential estimates for lives and injuries saved, as a result of the Measure, are sound and accurate.

We raised this issue at the Fire Sprinklers Consultation event held in Cardiff on the 7th May 2013, and the response we received was that because the Measure was not written to include these establishments, the WG has no remit to consider them. We do not believe this is appropriate. The Welsh Government states that this Measure arose due to a concern with deaths, injuries and property loss from fires. Indeed, throughout the consultation documentation the WG states that they believe the number of deaths and injuries from fire is still too high. In light of this, we cannot understand why the Welsh Government has chosen to ignore these establishments and their prospective risks from fire. We accept the Measure might not provide the remit to consider such buildings, however, we believe this points more towards a mistake made in the preparation of the Measure, which should be rectified, rather than a justification for the Welsh Government to take no action with respect to these establishments. In our view, a poorly written Measure should not be an excuse to ignore vital evidence. If the Measure would prove to be more effective by considering the inclusion of these establishments, it should be altered.

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes – however…

This would seem reasonable. However, we have a number of concerns, which are discussed in more detail below.

BS9251 Issues – particularly water issues

The BS states that sprinklers systems can be fed in a number of ways. I.e. by town mains, town mains with booster, or via a pump and tank. However, despite the method of water provision, the BS requires that a flow rate of 60 litres / min through a single sprinkler head or 42 litres / min for multiple heads is provided to ensure the system operates efficiently and effectively.

In terms of the above, we are concerned with how the BS is being interpreted and where the responsibility for ensuring the installation of an effectively operating sprinkler systems lies. Essentially, in certain parts of the consultation information (and by those presenting the consultation at the Fire Sprinklers Consultation event held in Cardiff on the 7th May 2013), there seems to be an assumption that because the BS allows for a number of methods of operation, any one of these methods could be considered suitable. Therefore, it seems to be suggested (particularly at the Fire Sprinklers Consultation on the 7th May 2013) that as the BS allows for a mains fed system, there will be no requirement for a system that operates via a pump and a tank (for example). However, in our view this is not the case. As we understand it, in terms of the effective operation of a sprinkler system the BS standard is clear that the pressure and flow rates will need to be guaranteed at the levels described above, and in doing so the BS states that this can be achieved either by mains, mains and pump, or pump and tank fed systems. Indeed, BS 9251 requires that when planning to use a mains water supply to feed a sprinkler system, prior to installation the minimum mains pressure and capacity should be ascertained in conjunction with the water undertaker. As such, it is clear from the BS that whatever method of water provision is used, for the system to operate effectively, a flow rate of 60 litres / min through a single sprinkler head or 42 litres / min for multiple heads must be achieved. Therefore, in our view it would seem that the designer/installer of a sprinkler system will need to devise a system that ensures these pressure and flow rates can be guaranteed at all times.

Further to the above, with respect to the effective operation of a sprinkler system, paragraph 58 of Section 1 of the consultation information states the following:- "*Where a mains system is to be used the designer should consult with the Water Authority to ascertain the typical operating pressure range and capacities available. Where the*

mains water supply is established as being able to provide adequate pressure and flow for the system, then it will be acceptable to use a mains connection in line with the recommendations of the appropriate technical guidance document such, as a British Standard."

Furthermore, the changes to the approved documents (para 2.6 particularly) state that:- *"Where town mains are to be used restrictions such as water meters shall not reduce the pressure and flow available below the performance specification detailed in the relevant technical standard*."

In light of the above, it is clear that certain parts of the consultation information also require the designer/installer of a sprinkler system to ensure that adequate pressure and flow rates exist before a specific system design is chosen. That is, in relation to the design options available within the BS, if water and flow pressures can be guaranteed by the water authority then it would be suitable to design the system to be solely mains fed. Conversely, if the water authority cannot guarantee the required pressure and flow rates, then an alternative system will need to be devised, in line with the options set out within the BS.

In terms of the above, it would seem that the decision on the type of system to adopt will rest with the designer/installer, but will depend significantly on the advice given by the relevant water authority. As such, it would therefore seem if the water cannot guarantee pressure and flow rates **at all times,** a solely mains fed system would not be appropriate. In light of this, despite some of the comments within the consultation information (and by those presenting the consultation at the Fire Sprinklers Consultation event held in Cardiff on the 7th May 2013), it is clearly not the case that a mains fed system would be an appropriate design solution in all cases.

Taking this point further, in terms of guaranteeing pressure and flow rates, a problem now arises. As we understand it, water companies will not, and cannot, guarantee water pressures or flow rates at any point in time, as pressure and flow are governed by a variety of different factors. For instance, pressure and flow will fluctuate by season, locality and will also be intentionally reduced if there is a leak or a burst pipe. As such, water companies will not be able to offer any guarantee with respect to pressure or flow rates for the operation of sprinkler systems. Indeed, this is entirely in keeping with their responsibilities under the Water Industry Act. In this respect, paragraph 75 of Section 1 of the consultation information, states the following:- *"The*

Water Industry Act 1991 (at s.218) defines "domestic purposes" in relation to water supply. The use of water for the purpose of fire-fighting is not a "domestic purpose" within the definition in the Act. Accordingly there are no statutory legislation or regulatory standards for flow and pressure relating to supplies for automatic fire suppression systems.

In light of the above, it is clear that not only will water companies not be able to guarantee pressure and flow rates, but they have no legal requirement or responsibility to do so. Indeed, the consultation states that Water UK advises fire sprinkler systems should be installed with consideration given to water companies' regulations and levels of service, noting that local conditions or requirements may mean the preferred design option is not available (para 82). As such, the responsibility to comply with the requirements of BS9251 will rest with the sprinkler installer or, more accurately, with the developer. This therefore suggests that the developer will need to take steps to ensure the pressure and flow rates required under BS9251 are maintained at all times.

In light of the information above, it would seem that some form of water augmentation, e.g. a pump or pump and tank, will be required to ensure a sprinklers system has sufficient pressure and flow. Notwithstanding this, as pointed out within Section 1 of the consultation information, there is concern about sediment being disturbed if a pump is simply added to the mains system. Therefore, it would seem that a pump and a tank would be the only feasible solution to ensuring water pressure and flow are maintained. This is confirmed by paragraph 105 of Section 1 of the consultation documentation which states that, "*the preferred approach of DCWW and Dee Valley Water is for domestic fire suppression systems to be supplied with water through an indirect storage-fed system such as tank and pump."*

Further to the above, the consultation tries to suggest that even if pressure and flow are not achieved, a sprinkler system would still operate, albeit not to the standard required by the BS. For example, paragraph 95 of Section 1 of the consultation documentation states that:- "…*However the pressure of the system will dictate how far water is thrown from the head but not necessarily how much water flows from the head. Therefore if the design of the sprinkler system is based on a pressure, which at the time of operation is reduced, water will still flow from the system but will not be thrown so far from the head. This means that a sprinkler head will not be as efficient under reduced pressure but would likely remain effective at suppressing fire growth in many cases."*

However, in our view, these comments are rather ill-considered and inappropriate. The idea that even if a sprinkler provides a lower water density or flow than required under the BS, it would still be 'better' than a non-sprinkered property, surely cannot be an acceptable basis for the proposed regulations. Clearly, if the case is to be made on the basis that 'anything is better than nothing', then there would be no need for complex impact assessments or thorough cost benefit analyses. Indeed, this notion flies completely in the face of one of the Welsh Government's primary goals for the regulations – i.e. "*…that each residence (to which the Measure applies) must be provided with an automatic fire suppression system, that* ***the system is operating effectively*** *and that the fire suppression system complies with such requirements as may be prescribed by Welsh Ministers."* (Paragraph 20 of Section 1 of the consultation documentation refers).

In light of the above, we believe the success of the Measure and the cost benefit analysis should be based on the effective operation of sprinklers systems, and not merely on the fact that sprinklers exist in a property (effective or not). In addition to this, the Measure and the regulations should not be designed in a way to allow a property to have a sprinkler system installed, that might not operate to its required specifications. Indeed, the changes to the Approved Documents stipulate that the system and its components must be designed and installed in accordance with an appropriate, fully implemented, technical standard such as BS 9251. As such, any regulations that are adopted in Wales must be robust enough to ensure that where sprinkler systems are installed, their operation is efficient, effective, and strictly in line with the proper specifications.

Water pressures and general fire fighting

The Section 1 of the consultation information states that water pressure are required for general fire fighting purposes, but are not guaranteed. However it is noted in the consultation that fire fighting water supply does not influence the design of building, whereas the provision of sprinklers (and the assumption that they will be working at the time of a fire) does impact on building design. Therefore the consequences of water supply failure might be greater for a mains-fed sprinkler system than for fire fighting operations. Furthermore, given that liability for the effective operation of a sprinkler system will lie with the developer, if water pressures and flow cannot be guaranteed, it is likely that the design of a system might require a pump and a tank to augment the water flow in all cases. This will clearly impact not only on building design, but on the design of the entire building footprint, as well as on cost. We cover

this in more detail below, however, clearly these are important issues that will need to be considered from the outset and are likely to necessitate a further re-run of the cost benefit analysis and the impact assessment.

Further to the above, paragraph 98 of Section 1 of the consultation information also states that water companies will commit to informing customers if the pressure in their area might no longer be suitable for the effective operation of sprinkler systems. As such, the consultation suggests that occupiers can then make the necessary adjustments to their systems, such as installing pumps and tanks. Firstly, we do not believe this is accurate. For instance, in our discussions with Welsh Water, they have indicated that they might not inform customers in all cases where there is a drop in pressure or flow, but only in certain circumstances e.g. where there is a permanent reduction in pressure and flow. As such, we do not believe paragraph 98 is correct in this regard and we would advise further consultation with water companies on this issue. However, notwithstanding this, even if it were the case that water companies would inform customers in all cases where pressure and flow are affected, we do not believe the approach set out within this paragraph is acceptable, as is likely to cause a great deal of concern and confusion for both the property owner and the developer.

The installation of a retrofitted pump and tank is likely not to be a straightforward or inexpensive process and the proposed regulations simply cannot allow a new home purchaser to be left in the situation where their newly built home has a potentially ‘defective’ fire prevention system. In the event of such an instance, it is clear the purchaser will not expect to foot the bill for the necessary works to rectify the issue and will no doubt expect the developer or the NHBC warranty to address the matter.

In the event that there are disagreements on how the issue will be rectified, this could cause major problems for the occupier and also impact significantly on the developer. Furthermore, the developer could find themselves in a situation where they would have to inform a prospective customer that the sprinkler system might not be operationally effective in certain circumstances (due to water pressure and flow issues) and therefore, notwithstanding the safety implications of this, it could also impact on the potential saleability of the property.

There are clearly many more problems that will arise if the proposed regulations are made without the need to ensure that fire sprinkler systems are designed and installed according to the British Standard and are operationally effective at all times. Indeed, Para 109 of Section 1 of the consultation documentation, confirms the need for more clarity on this issue by stating that, in terms of mains fed systems*, “… for properties*

where fire suppression systems are installed, the two main water companies cannot guarantee pressures and flows above the minimum guaranteed standards for pressure (1 bar/ 10m head) and flow (9 litres/ minute) These flows and pressures apply to domestic supplies only. ***This should always be taken into consideration by the designer/installer before proceeding with any installation.****" (bold emphasis is ours)*

In light of the above, these important issues cannot just be 'sidestepped', and effectively left into the hands of home owners to resolve if problems arise. As such, we believe the Measure must ensure that sprinkler systems are installed in line with the BS standard and any other specifications to ensure they are operationally effective at all times.

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes.

We believe this would be a reasonable approach.

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

No.

Please see question 6 for more information.

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes.

Since the inception of the measure, the issue of maintenance is one which has been discussed at length, yet the Measure seems to be relatively silent on the issue. We have heard conflicting viewpoints on need and importance of maintenance, however, one would imagine that the maintenance of a sprinkler system would be an integral aspect of the system to ensure it is operating efficiently and effectively. This is the case with most household appliances and systems, however, given the nature and remit of a sprinklers system, one would assume that regular maintenance to ensure the system is functioning properly, would be even more important. In this respect, we posed questions regarding maintenance at the at the Fire Sprinklers Consultation event held in Cardiff on the 7th May 2013. In terms of our questions, some audience

members responded to state that maintenance would be essential, however, the presenter from BASFA (speaking at the request of the Welsh Government) seemed to suggest that home owners should not be too concerned with the maintenance of sprinkler systems, as there is *'not that much to maintain'*.

In terms of these comments, they did not seem to be based on any technical evidence on the need (or otherwise) for maintenance. Conversely to this, the changes to the Approved Documents states that it is **essential** that automatic fire suppression systems are properly designed, installed and **maintained.** (Bold highlighting is ours). Furthermore, para 128 of Section 1 of the consultation information states that anecdotal experience of BS 9251 systems in residential premises has suggested that the lack of regular testing has caused issues with the operation of sprinklers systems, such as pumps seizing. As such, we cannot understand how in some cases the issue of maintenance is being considered so lightly. These comments are also rather alarming given that paragraph 3.2.6 of the cost benefit analysis states that, on the advice of the sprinkler industry, the assumptions used within the analysis are based all systems being maintained annually in accordance with the BS. In light of this, we believe it is inappropriate for the Welsh Government to effectively play-down the importance of maintenance and we believe the Welsh Government should consider this issue in much more detail, before suggesting to the public at large that sprinklers systems do not need to be regularly maintained.

Further to the above, given that many current appliances are not regularly maintained, (for example, we understand that less than 30% of gas boilers benefit from a maintenance agreement), it is likely that the maintenance of sprinkler systems might follow the same course, unless clear guidance is provided on the matter. Indeed, as the consultation document points out, with other appliances in the home there might be more immediate and obvious problems that arise to alert you to the fact that the appliance or system is faulty. However, with a sprinkler system, the fault might only be discovered when the sprinkler activates to address a fire, which could have serious implications.

Furthermore, careful thought must also be given to the safety of maintenance engineers and others that need to gain access to the system. In this respect, if a sprinkler system has a tank that is required to augment the water supply, which has not operated for a significant length of time, the stagnant water within the tank could represent a risk to safety, particularly if there are no regular maintenance procedures

put in place for the tank and its contents, or if the tank needs to be replaced or repaired for any reason.

In addition to the above, paragraph 134 of Section 1 of the consultation documentation states that it may be beneficial to encourage the building insurers to request evidence of sprinkler system maintenance in order to provide insurance. In this respect, we believe it is imperative the regular maintenance is given far more weight within the current proposals, particularly if it will impact on the homeowner's ability to obtain buildings and contents insurance.

In light of the above, we are extremely concerned with the comments and relatively little importance attached to the issue of proper system maintenance. We believe the issue of maintenance should be considered in much more detail and we certainly do not believe the Welsh Government should send out the message to potential home owners to suggest that they need not concern themselves with regular and proper maintenance of sprinkler systems.

Further to the above, we also believe the cost of maintenance should be considered appropriately within the cost benefit analysis and the impact assessment. Given our comments above, we are not clear how the issue of maintenance has been considered in the evidence on cost assumptions and therefore, we are concerned that the current cost assumptions with respect to maintenance might have not have been properly considered.

Commencement and Transition

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

No.

No. We do not believe the proposed approach has been properly thought through and therefore, we do not believe the regulations should be changed on the dates suggested.

In terms of transitional arrangements, we believe it is important to ensure that commencement and associated transitional arrangements should remain as currently applied, i.e. there should be no shortening of the period between setting the regulations and their introduction, in addition to the standard transitional arrangements.

Further to the above, we believe a longer transition period should be considered, which will allow sufficient time to address the concerns we raise within our response.

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection remain relevant given the proposals covered by the new legislation?

No comment.

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

We are unclear whether or not there is a *competent persons* scheme for the installation of sprinkler systems. We believe it is essential to ensure that those installing sprinkler systems are suitably qualified to do so and therefore, we believe consideration should be given to ensuring such a compliance scheme exists.

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes – however…

We have studied the approved documents and it is noticeable that there are many instances where they stipulate that sprinkler systems must be designed and installed in accordance with an appropriate, fully implemented, technical standard such as BS 9251: 2005 or equivalent. In this respect, we believe this supports our concerns above on the way in which the regulations are being considered. That is, there seems to be an approach being promoted that provided a sprinkler system is installed, it doesn't matter whether or not the system is functioning properly. For example, we have highlighted occasions where the consultation information suggests that:-

- possible reductions in water flow rate and pressure are not considered a barrier to installation via mains supply
- the mere existence of a sprinkler system would negate the fact that the lack of water pressure and flow might result in a sprinkler system not operating properly
- maintenance is not a significant issue

However, despite these comments above, the approved documentation stipulates that sprinkler systems must be installed and designed to the appropriate British Standard and must be properly maintained.

We believe these contradictions need to be addressed before the regulations are made and again, we reiterate that any regulations that are adopted in Wales must be robust enough to ensure that where sprinkler systems are installed, their operation is efficient, effective, and strictly in line with the proper specifications.

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

No.

The cost benefit analysis clearly demonstrates that installing fire sprinklers into new 'homes' would not be cost effective. However, given the evidence we have gathered throughout this consultation, we believe it is reasonable to assume that the negative net present values provided within the results of the assessment would be impacted even further.

Pease also see question 12 for more information.

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

No.

We do not agree that the cost benefit analysis is reasonable for the following reasons:-

We believe the cost benefit analysis could be based on incorrect information on the potential number of lives saved and injuries prevented by the proposed regulations. This is covered extensively above. In this respect, if incorrect data is inputted into the cost benefit analysis, it is likely to impact negatively on the soundness of the analysis and also on the results of the impact assessment.

In addition to the above, we believe the installation cost of a sprinkler system has not been properly considered. For instance, in our evidence above we have considered the issue of water pressure and flow and the implications these issues can have on the design of a sprinkler system. In this respect, considering the requirements of the BS and the position set out within the Water Industry Act on the responsibility of Water Authorities in guaranteeing pressure and flow rates, it is highly likely that in order to properly comply with the BS, the system's water supply will need augmentation via a pump and a tank. Furthermore, there are also certain design stipulations given within the approved documentation on issues with respect to vehicular access to pumps etc (paragraphs 16.2 and 16.3 of the Summary of Approved Documents refers). As such, it will important to consider how a fully compliant and effective sprinkler system would

be designed and costed, in order to provide the necessary infrastructure to cope with the system's requirements.

In this respect, in order to provide a pump and a tank, careful thought will need to be given with regard to where the tank will be situated. Throughout the consultation process, our members have advised that situating a tank in the roof space of a dwelling will not be possible for the majority of cases. For instance, many of our members design homes with rooms in the roof space and, for many properties it simply would not be feasible to store tanks within the roof or any other part of the property. As we understand it, the Welsh Government has been provided with this evidence through the BRAC Wales forum. As such, it is likely the tank will need to be buried in the ground at some convenient point within the property cartilage to ensure access for maintenance etc. Clearly this will require a substantial cost, not only with respect to providing the tank and its siting requirements, but also with respect to the infrastructure required to operate the sprinkler system and also to design of the property to ensure the tank can be accessed 24 hours a day for maintenance and other requirements. Further to this, we must also consider the requirement for 'cart way' costs and the likelihood of a significant amount of material to being taken to land fill sites.

In terms of the above, we recently discussed these issues at a meeting with AECOM (1st May 2013), the consultancy charged with undertaking the assessment of the cumulative impact on development viability as a result of the proposed changes to Part L of Building Regulations and fire sprinklers. At this meeting the potential cost of a sprinkler system was discussed at length and it was acknowledged that there were some significant issues with respect to the sprinkler installation costs assumed within the assessment. Following discussions at this meeting, our members concluded that the cost of installing a sprinkler system in the average three bed semi detached dwelling could be in excess of £5000 per home (as opposed to £3075 as quoted within the WG's viability assessment). As a result of these discussions, AECOM accepted that more work was needed to establish the actual cost of installing a sprinkler system. As we understand it, this work is currently being undertaken and will clearly need to be taken into account within the cost benefit analysis and also within the impact assessment for the preferred option.

In light of the above, we do not believe the cost benefit analysis has properly considered the impact of the preferred option. In our view, the analysis needs to be re-run as a matter of urgency, taking into account the issues we have raised above and throughout this consultation response.

Other Issues

Sprinklers in individual flats

Paragraph 63 of Section 1 of the consultation documentation states an automatic fire suppression system need only be provided within the individual flats and would not normally be required in the common areas such as stairs, corridors or landings.

We are concerned with this approach. As we understand it, the provision of sprinkler systems in communal establishments is particularly effective when provided in areas that offer a means of escape, such as corridors, stairs and landings. Indeed, where sprinklers are currently fitted in certain fatted developments, they are fitted within such areas. However, it would seem the legislation, if implemented as currently proposed, would alter this approach.

In light of the above, we are concerned with the proposals in this regard and we believe further investigation and consultation is warranted to ensure the legislation is fit for purpose and does not unnecessarily alter the current situation to the determent of safety.

Backup power supplies

We have a particular concern with the fact that, through the regulations, there will be no requirement for back-up power supply for pump fed systems. In this respect, we believe it is important to consider what might happen in the event of a power cut or if people with an electricity meters fail to keep up with their payments. In this respect, if the lack of power results in the fire suppression system not working, the implications of this could be very serious and concerning to the homeowner.

In addition to this, we have also heard evidence from the RSL's sector that they are likely to come under pressure to pay for electricity, if the potential safety of the property and the occupants becomes an issue. Further to this, it is unclear how this might other types of landlord. In this respect, the approved documentation states that a landlord would be responsible for ensuring a sprinkler system operates to the required standards at all time and therefore, one would assume that landlords would also be under obligation to ensure the electricity supply remained constant, if the sprinkler system depended on it.

We believe these issues have not been properly dealt with and as such, the proposals need to be reconsidered to ensure these important matters are addressed.

The cumulative impact of regulation

Lastly, but most definitely not least, is the issue of the cumulative impact of regulations. In terms of this issue, it has been covered extensively both through our previous consultation responses to the sprinklers agenda and through the proposed changes to Part L of Building Regulations. We have also covered this issue separately, again at length, with the Welsh Government over the last few years. To be clear, we believe these proposals, along with the cumulative impact of separate national and local legislation, will severely compromise development viability in Wales. This will in turn compromise the delivery of homes, including affordable homes, and stifle growth and investment in many areas throughout Wales.

Essentially our concerns on this issue remain as valid as ever, perhaps even more so, given the potentially underestimated cost of providing and installing a sprinkler system. In terms of the issue of cumulative impact, this was discussed at length at the recent meeting with AECOM on the 1st May 2013 (discussed above). At this meeting, the group was presented with a set of residual land values that were achieved as part of the viability testing undertaken by the consultancy on behalf of the WG. In this respect, within the three areas tested (Cardiff, RCT and Conwy), the vast majority of the residual land values were negative, proving that along with the changes proposed to Part L of Building Regulations and the other local requirements that need to be met, the proposal for fire sprinklers will have a significant detrimental impact on development viability. Further to this, one important issue to note about this test of viability is that the assumption was made to reduce affordable housing requirements to zero. As such, even without any affordable housing being proposed, the viability of development is significantly affected in all areas tested.

In this respect, given that the delivery of affordable housing is a key Welsh Government priority, one must question the appropriateness of any assessment of viability that deliberately excludes any assumption for affordable housing delivery. Notwithstanding this, it is telling that even with affordable housing removed from the equation, the impact on development viability is still devastating, even in higher land value areas such as Cardiff.

Furthermore, the fact that these proposals are being brought in through building regulations is a further point of concern. This effectively means that they will be required by law and will therefore not be ‘negotiable’, as is the case with many other

pieces of regulation (particularly planning regulation). Therefore, the cost of these proposed regulations will be required irrespective of the separate priorities of the Welsh Government or local authorities. The cost of the regulations will also be indiscriminate, meaning that will affect development in all areas of Wales, whether land values are low or high.

In light of the above, we believe it is incumbent on the Welsh Government to fully explain the potential impact of these proposals on development viability and the delivery of homes in all areas of Wales. As such, we believe the impact assessment should fully demonstrate the cumulative impact of this and other legislation on land values in Wales and what this will mean for housing development, including affordable housing delivery across **each local authority** in Wales. Furthermore, we believe the impact assessment should also highlight the potential impact on regeneration, growth and investment in Wales, particularly given that as a result of cumulative impact of these proposals, there is likely to be a significant drop in housing development, especially in lower land value areas.

Recommendations

In light of the above, despite the numerous potential flaws within the cost benefit analysis, the impact assessment, the creation of the Measure, the potential success of the measure and the viability analysis work, it would seem there is a substantial amount of evidence weighted against the adoption of the 'preferred option'. Furthermore, if the flaws we have highlighted within the research and evidence are rectified, we believe it would be reasonable to assume that the case for the 'preferred option' would be reduced even further.

In this respect, given the evidence to hand, whilst we agree with the principle of the overall Measure to tackle the issue of deaths and injuries from fire, we believe the evidence points to the regulations being considered with respect to Policy Option 2, which deals with the installation of sprinklers in all residential buildings within the categories covered by the Measure deemed to be cost effective (in accordance with the cost benefit analysis). At present, according to the cost benefit analysis, this policy option seems to indicate that the costs do not outweigh the benefits, however, we are mindful of the additional work that needs to be undertaken (as set out by our comments above), which ultimately might also impact negatively on this policy option - for instance, the need to consider the 'new build vs existing stock' argument etc.

There also needs to be similar work undertaken on the cumulative impact of regulation for Policy Option 2 (as we mention above), in order to ensure the impact assessment considers the full impact of this legislation, along with the plethora of other regulatory requirements that are sought on a national and local level.

End.

Richard Price
The Home Builders Federation

152-17935 - Hertfordshire Fire and Rescue Service (Dave Gould)

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: David Gould

Organisation :
Joint Protective Services (JPS) Hertfordshire Fire & Rescue Service (HFRS)

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes x

Comments: Yes ,the exercising of functions under the Building Act 1984 to make changes under Part B of Building Regulations appears to be the most effective method of introducing the measure which avoids duplication and bureaucracy.

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes x

Comments: Yes, in addition to the residences listed in Paragraph 28, the premises listed in Paragraph 31 appear to address the significant issue of reducing risk to the most ‘vulnerable’ and ‘hard to reach’ groups. The premises that are not included within the scope (Paragraph 32) appear to be proportionate to the risk, with managed premises and lower risk properties. The inclusion of Halls of Residence in the measure will reduce the burden of regulation to Local Authorities and Academy schools by allowing some design freedoms.

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes **x**

Comments: Yes, it is considered imperative that any systems which are provided to address risk to life are provided, installed and maintained to the appropriate British Standard for domestic and residential occupancy systems (BS 9251). The system requirements for installations under BS 9251 are less onerous for developers and the 'end user', in terms of the initial cost of installation and the maintenance of the system during its 25 year lifetime.

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes **x**

Comments: Yes, if this legislation is introduced, developers and designers will inevitably be looking to achieve the current British Standard. This may be met by the use of the new technology employed in 'misting' systems which are currently covered under a Draft for Development (DD) 8458. The opportunity and challenge for the industry will be for the designers and developers to meet a British Standard in cost effective and creative ways.

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes **x**

Comments: Yes, the proposed arrangements detailed in the consultation document appear to be wholly consistent and proportionate to the risk .The direction not to regulate maintenance will clearly reduce the burden on both the end user and the developer. Further regulation is therefore considered unnecessary and could have negative impact in terms of the effectiveness of the measure.

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes **x**

Comments: Yes ,the aim of the measure is to reduce the risk to residents of fire related deaths and injuries. Encouraging a culture amongst householders and residents that recognises the importance of the residential / domestic sprinkler system and its role in ensuring their safety is the key message to

deliver .It will clearly take time to influence residents, especially the vulnerable and ‘hard to reach’ groups, however, publicity in respect of the measure, public safety campaigns and a simple ‘householders guide’ will help to encourage householders to take ‘ownership’ of the sprinkler system. In addition, it is hoped that the contractors will clearly explain the benefits of the system to residents on hand over, assisting in creating customer ‘buy in’.

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes x

Comments: Yes, we have no objections regarding the changes in Building Regulations and the full introduction of the measure during spring 2014 will be welcomed.

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[57] remain relevant given the proposals covered by the new legislation?

Yes x

Comments: Yes, the Skills For Security Board has produced a detailed and comprehensive set of competencies required to fulfil roles and functions in the mechanical fire protection sector. It is pleasing to see that the National Occupational Standards (NOS) not only covers design, installation, commissioning and maintenance, but also customer service elements. Also NOS consider the skills and knowledge required to establishing customer requirements and handing over the system to the customer. This element is crucial to the whole schemes success as creating ‘buy in’ with customers will ensure that any defects or maintenance issues are identified quickly and rectified. This is key to success of the measure in terms of delivering the expected outcomes and benefits to the communities of Wales .

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

No x

Comments: No , we have reservations regarding the existing sources of training. We believe that these need to be improved to respond to the

[57] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

expected demand for competent engineers to carry out the installation of residential and domestic sprinkler systems. The industry needs to work in partnership with key stakeholders to identify skill gaps and robustly take up the challenge of providing appropriate skills and training ; therefore creating capacity in the workforce to deliver the Domestic Fire Safety (Wales) Measure 2011 in an efficient ,effective and economic way .

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes x

Comments: Yes, we do not have any objection to the proposed changes to Approved Documents.

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes x

Comments: Yes ,the Cost Benefit Analysis (CBA) appears to be reasonable and highlights some sobering statistics regarding the cost to society of a single life. This being £1.6 Million for a fire death and the cost of a fire related injury averaging £20,000. The cost of the installation of a domestic sprinkler system is estimated at £2000 for a House and £620 for a flat, which would support 'anecdotal evidence' that the cost of a sprinkler system can be compared to the cost of carpeting your new house with a budget grade carpet. The sprinkler systems have an expected life of 25-30 years. The estimated number of lives that will be saved in Wales over the next ten years totals 35, with 799 people spared the pain and suffering of a fire related injury.

The report from the National Assembly for Wales (NAW) Finance Committee concluded that "there is no evidence that they will be seen as a significant burden on house buyers or have a significant impact on the housing market"

In addition, Welsh Government (WG) although mindful of the CBA findings, in terms of the cost of the introduction of the measure for domestic single households, concluded that society must seek to prevent avoidable death and injury due to house fires. We support this key objective.

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes **x**

Comments: Yes, the Regulatory Impact Assessment (RIA) clearly states the risks and issues affecting the measures viability and sustainability. It appears that many existing contractors are already up-skilling their workforce in preparation for the measure to be introduced. The impact on developers is estimated to be a reduction in land values to 3-4% below the current average values .However, the report points out that developer will already be negotiating very hard on land values when looking to develop affordable housing in line with a local plan or supplementary planning guidance. Therefore, the main impact on developers will be a slightly lower capital return on their investment until they are able to maximise a capital return by the use of new technology or exploit the economies of scale in the new sector.

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

Mains supply : water supply issues
Section 97-101
Householders will need to be assured that the mains water supply for the sprinkler system will not be subject to a charge from the water company if operated due to a fire or a system malfunction. Can you confirm that this will be addressed in the legislation / guidance to water companies?

153-17935 - Neath Port Talbot CBC

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: **Paul Davis**

Organisation (if applicable):**Neath Port Talbot CBC**

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes x
No ☐
Comments:

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes x
No ☐

Comments: Further information is required breaking down the number of deaths that occurred in Approved Document B compliant properties and properties constructed prior to the introduction of Approved Document B, along with a breakdown of the property types to supplement the BRE report. This information could be used to determine the effectiveness of the current legislation and allow for the risk profile of property types to be cross referenced against the adequacy of the current legislation in relation to those types.

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes x
No ☐
Comments: BS 9251is the current recognised guidance for sprinkler systems for residential and domestic occupancies; it would be a natural progression for it to be adopted as the main standard by which the requirement can be met.

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes x
No ☐
Comments: By agreeing flexibility to the guidance to refer to other fire suppression systems it will allow for new approved technologies to be used as they develop along with relevant European standards.

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes ☐
No x
Comments: Although difficult to regulate unless the maintenance of sprinklers is made mandatory there is no way of guaranteeing the effectiveness of the suppression system in the event of a fire.

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes x
No ☐
Comments: However the guide should be kept short and simple to ensure its use.

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes x
No ☐
Comments: The approach allows time for the industry to adapt to the changes in legislation

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[58] remain relevant given the proposals covered by the new legislation?

Yes x
No ☐
Comments: However training and a minimum qualification should be made mandatory for all installers.

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes ☐
No x
Comments: The current training appears to be based primarily on the fire suppression systems installer; however more emphasis is required on providing specialist training for the design team, building control inspectors etc.

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes x
No ☐

Comments: However further information is required to establish the true benefits of the proposed changes.

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

[58] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

Yes x
No ☐
Comments: The cost benefit analysis in general appears comprehensive, however the figures contained can vary substantially based on the demographic location and type of development. The analysis does not account for deaths that have occurred pre and post the implementation of approved document B and the effects the current legislation has on reducing the number of fire related deaths. Nor will it impact upon older properties which are currently in residential use, which far exceed the number of new properties which would be subject to these regulations if introduced in the future.

Viability work has been undertaken by the Authority in relation to the ability of sites to contribute to affordable housing. As part of this work, we undertook some scenario testing that looked at the effect that sprinkler systems may have on viability. This was done on the basis that it would be £3,500 per unit to install a sprinkler system. Essentially, it had a negative effect on the number of affordable units that could be obtained on development sites.

The £3,500 was based on the best estimate of third parties at the time we did the valuations. Also, there is the argument that 'economies of scale' etc will reduce the overall cost to developers of installing fire sprinklers, so the negative effect maybe reduced over the long-term.

This additional cost may make sites unviable in the future and could also result in the reduction of affordable housing delivered from new sites and the provision of community facilities normally secured through S106 agreements.

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes x
No ☐
Comments: However further research could have been carried out to establish when the properties were constructed and construction types. This would have given a greater understanding of the percentage of deaths that occurred in part B compliant properties and possibly different construction types traditional masonry construction verses timeframe etc. Greater consideration is required in relation to ensuring water pressure to properties is maintained by the service providers.

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

The proposals put forward will only affect new properties so will not contribute to the reduction of deaths/injuries in Wales. At best the proposals will reduce the potential increase of deaths/injuries. However due to the lack of available statistics to show the current benefits of the life safety provisions in approved document B, it will be difficult to confirm if the intended benefits from the introduction of sprinklers can be measured given the lack of benchmark statistics to compare against.

Under the current legislation, part B compliant escape egress windows are only required on new build or when replacing a window that is currently compliant. As life safety is paramount, it would be beneficial if the current legislation was changed to require installers replacing windows, to comply with the current approved document B where practicable. It is also recommended that in the case where a whole property is rewired, there should be a mandatory requirement for the installation of smoke heat detectors at the same time.

154-17935 - All Wales Community Risk Reduction Group

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: Christopher Davies
Organisation : All Wales Community Risk Reduction Group

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes ☒
No ☐
Comments: This method appears the most appropriate for implementing the Measure. However there is no obligation to adopt any particular solution contained within the approved document and there is a danger that attempts will be made to meet the functional requirement by some other method thereby circumventing the intent of the measure.

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes ☐
No ☒
Comments: The list of residences appears appropriate; however more detailed guidance is required regarding the position of schools used for accommodation, in that they need to be included. Item 28 page 8 (d) defines residences as--- residential accommodation for pupils of a school. However in the table on page 11 Schools used for accommodation are not within the scope of the measure Also the difference between a boarding house and a hotel requires further clarification. Some hotels now house guests on a relatively long term basis, such as families awaiting social housing, providing them with full board. If a premises of this nature , was either newly built or extended and called a hotel by the developers there would be no requirement for sprinklers, if on the other hand in a true reflection of its intended purpose it was called a boarding house sprinklers would be required.

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes ☒
No ☐
Comments: For the majority of premises falling within the scope of the Measure BS9251 would provide an appropriate standard, whilst for some larger premises BS12845 or other appropriate standards that can prove equivalency to British or European standards may be more suitable. There will be instances in mixed use buildings to which the fire safety order applies, where the latter standard will be the most appropriate standard to address the risk.

The potential for installers and designers to derogate from the standard should not be excluded; strict adherence to BS9251 would require that only parts conforming to BS9252 would be acceptable. At the moment there are no sprinkler heads available which conform to this standard. The designer should retain the option to use alternative components, as is the case presently, as long as those components are tested to an accepted standard such as UL 1626 where there is a data sheet available which supports their suitability for the application in question. Similarly where a designer chooses to utilise another standard such as NFPA13d for the entire system this should be permissible within the Measure as long as the proposed standard has been robustly tested and found appropriate for the application in which it is to be used.

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes ☒
No ☐
Comments: There is an obligation on the enforcing authority to accept British or European standards. Whatever standard is utilised, the suppression system must be suitable for the application it is being proposed for and must be designed and installed to a recognised standard. In house testing is not acceptable.
Any system installed must be true to the intent of the Measure, providing it secures a reasonable standard of health and safety for those persons using the building. It should not be sufficient for a designer to propose a system which would protect only the access rooms and escape routes, due cognisance must be given to the fact that 53% of all fire fatalities occur in the room of origin and it is within these rooms that the Measure will have its greatest impact.

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes ☒
No ☐

Comments: For those premises and parts of premises which fall under the Regulatory Reform (Fire Safety) Order 2005 the maintenance of suppression systems can and should be enforced under the Order.

This is of particular relevance where design freedoms are allowed on the basis of sprinkler provision which may have the effect of reducing the passive structural elements of fire safety such as fire doors, compartmentation and fire resistance.

In single private domestic dwellings, which are not covered by the Regulatory Reform(Fire Safety) Order 2005 (RRO)insurance companies are best placed to oversee continued compliance relating to maintenance, by way of conditions detailed in their policies. This is also the case for rented accommodation, however this could be further improved by way of a system of control similar to that of the landlords gas safe certification scheme.

As BS9251 is a domestic standard concessions should not be assumed regarding other fire safety measures when a BS 9251 system is installed in commercial premises regulated by the RRO.

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes ☒
No ☐

Comments: The guide should support the points raised in question 5 above and give clarity to the distinction between single private, rented, and premises regulated by the fire & rescue services

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes ☒
No ☐

Comments:

The building industry has had almost two years to address training and supply chain issues, the specifications need little development as they are existing.

There may be significant impact for the Fire and Rescue Services in Wales. Each of these Services will be consulted on all Building Regulation applications within their service area for premises which are caught by the Regulatory Reform (Fire Safety) Order 2005. If they are subjected to a large number of large scale developments intended for the following three years this will significantly stretch the available legislative fire safety resources.

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[59] remain relevant given the proposals covered by the new legislation?

Yes ☒
No ☐
Comments: The NOS is suitable for domestic sprinkler systems but should be the subject of a review if other fire suppression systems gain a British Standard or European rating

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes ☐
No ☒
Comments: The issue of fitness for purpose will not be affected by the implementation of the regulations. An increase in the volume and geographical location of training providers will probably be needed to meet the expected demand. The NOS for mechanical fire protection should ensure the training remains at an acceptable and consistent standard
The capacity however may not be sufficient. Consideration should be given to an approvals process for any companies seeking to enter the training provision market in order to reduce any possible reduction in training delivery standards.

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes ☒
No ☐
Comments: Whilst the majority of the changes are appropriate, paragraph 18.13 in Approved Document B volume 2 – Buildings Other than Dwellinghouses implies that a sprinkler system installed to BS: 9251 would be appropriate for use when designing a mechanical smoke extraction system for a basement, BS12845 allows a designer to choose a nominal fire size of mW

based on assumed maximum area of operation, this is not possible under BS9251 and an assumption of a 5mW fire may be incorrect.
Additionally the issue of duration of supply could have serious implications for firefighters, firefighting in basements is arduous and dangerous, and therefore time must be taken before affecting entry to ensure that all health and safety protocols are being observed. A residential system installed under BS: 9251 has a guaranteed supply of 30 minutes and this is likely to be sufficient to control the fire until internal firefighting operations can be commenced. However a domestic system under 9251 has a guaranteed supply of only 10 minutes and the system would have ceased to operate before firefighting operations can be commenced; this substantially increases the risk to firefighters. Mechanical ventilation of basements should be acceptable only where a BS: 12845, or equivalent, system is provided.

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes ☐
No ☒
Comments: The value of life is not adequately quantified to enable sufficient validation of the Cost Benefit Analysis; if this value were reflective of data from other industrialised countries such as the USA for example then the case could be deemed beneficial in terms of single private dwellings which would justify all the premises within the proposed list of residencies. Also many new large scale developments will benefit greatly from economies of scale. In relation to training the annual cost of recertification seems unrealistically high

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes ☒
No ☐
Comments: Option 3 (Do nothing) is considered as having no cost, however whilst it is accepted that this option calls for no capital outlay, doing nothing will not deliver the net benefit predicted for the previous two options, therefore the cost of doing nothing could be as high as £48.8m (option 1)

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

As the measure specifically deals with the reduction of death and injuries in residential properties ,the changes to the ADB should also include the

extension of the fire alarm into the loft space, This is particularly important to new build housing stock fitted with control switch gear to regulate the power from solar panels as this industry is ever increasing and presents significant fire fighting difficulties to fire and rescue personnel in the event of a fire either in the regulating equipment or the roof void .The provision of automatic fire detection is already a requirement in new build housing.

The references in the “use of the guidance” section in both volume 1 and 2 to ADB (0.16 ADB Vol1 &2) referred to it being normal practice to sprinkler the building throughout. The proposed amendments to ADB no longer make this statement. As we are all aware the purpose of a sprinkler installation is to detect and control the fire size to allow for successful intervention by the fire and rescue service. Where the measure will result in part of the building requiring sprinkler coverage the fire separation in volume 2 is the minimum requirement for fire separation and not the minimum standard of fire separation referred to in the proposed 9251 standard. In addition to ensuring adequate fire separation the note in section 1highlights the issue that high fire loading may result in the requirement for an installation in accordance with BS EN 12845 .This particular issue need to be highlighted in the review of the BS 9251standard to ensure that fire loading hazards are adequately identified and the appropriate type of installation installed to control that risk.

155-17935 - Torfaen County Borough Council

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: **Robert Murray**

Organisation (if applicable):
Torfaen County Borough Council

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes ☐
No ☒
Comments: **The increase in cost for installing sprinklers (fire suppression) will significantly impact on the delivery of affordable housing in Torfaen, specifically in the Heads of the Valley areas i.e. North Torfaen due to the low land and market values, higher ACG values and low incomes.**

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes ☐
No ☒
Comments: **The CBA is particularly unfavourable for individual dwelling houses.**

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes ☐
No ☐
Comments:

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes ☐
No ☐
Comments:

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes ☐
No ☐
Comments:

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes ☐
No ☐
Comments:

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes ☐
No ☒
Comments:

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[60] remain relevant given the proposals covered by the new legislation?

Yes ☐
No ☐
Comments:

[60] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes ☐
No ☐
Comments:

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes ☐
No ☐
Comments:

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes ☐
No ☒
Comments: **The viability evidence is questioned.**

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes ☐
No ☒
Comments: **The potential affect on viability of housing schemes and the consequent effect on the provision of affordable housing has not been adequately assessed.**

An important point to make is that the regulations are proposed to come forward in advance of proposals in England. As Capital is mobile House builders have the option of investing their resources in England where these obligations will not be in place. House building in Wales is already experiencing severe challenges and further costs in the region will have potentially severe effects on house building investment if these costs are not experienced in a readily available alternative market.

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here: **I would like to stress that we do take safety of residents very seriously however far greater returns on safety would be achieved by investing fire safety measures in older housing stock rather than new build which are already much better provided for and where safety in relation to new dwellings is already very good.**

It has been estimated that the fire suppression measures with Part L changes to the building regulations will cost £15m from the provision of affordable housing within Torfaen County Borough Council by 2021. This will have a severely detrimental effect on the provision of affordable housing within Torfaen which is a key local and national priority.

156-17935 - Linc-Cymru

Consultation on Domestic Fire Safety (Wales) Measure 2011

Linc-Cymru Housing Association Ltd specialises in the affordable housing, social care and health sectors in Wales. We provide homes, advice and services to our existing and prospective tenants across the social, intermediate and market rent sector.

Question 1 – Proposed approach

Linc-Cymru agrees with the proposed approach; we consider it is appropriate to use the Building Regulations to ensure there is clarity on types of residences and to ensure integration with Part B. Utilising the Building Regulations will bring a more consistent approach to implementation. Section 1 of the Measure will set the message; the Building Regulations will ensure delivery.

Question 2 – Proposed list of residences

Linc-Cymru has considered carefully the meaning of 'residence' and considers the starting assumption should be that automatic fire suppression systems should be installed in multi-occupancy properties, and those residences designed for vulnerable people. On this basis we agree that the following should be included –

(a) Flat (over 3-storeys);
(b) residential care home;
(c) residential accommodation for pupils, students, etc
(d) room or group of rooms not part of a single household;
(e) where a building contains one or more residences, includes any part of that building intended to be used by those occupying that residence or those residences for purposes ancillary to that occupation in common with one another or with other users of the building;
(f) children's residential homes where these are organised as a single household;
(g) boarding houses; and
(h) types of hostel which could be intended for long term "living" (such as hostels for homeless people).

This will therefore exclude dwelling houses for single households.

Question 3 – BS9251 guidance

We agree the guidance should include reference to the appropriate British Standard; if the appropriate BS for residential properties is BS9251 then this should be referenced. We are not aware of alternative standards which may be referred to, and therefore have no additional comments.

Question 4 – Flexibility to refer to other fire suppression systems

The consultation document is not clear as to what other fire suppression systems may be used, only that is the BS for domestic dwellings and the BS for commercial properties.

However as a general approach Linc-Cymru would prefer unambiguous guidance, with clear reference to the appropriate standards and suitable cross reference to the Part B regulations (and any other statutory requirements).

Question 5 – Not to regulate for maintenance

Although it is recognised that the Welsh Government's proposals will apply to private properties as well as those developed by, for example, social housing providers, we consider that maintenance of the proposed systems is essential and that private homeowners and social landlords should be under the same requirements to maintain the systems.

We note the requirements given in the consultation guidance under, for example, BS9251. Were this standard to be adopted, as suggested above, then the adoption should include maintenance and periodic inspections.

Question 6 – householder's guide

A householder's guide would be welcome, and the proposed content appears to be suitable. However it should not be a substitute for periodic inspection and maintenance by suitably qualified persons, underpinned by regulatory requirements to maintain the systems.

Question 7 – commencement

We agree there should be a period of not less than six months from the making of the Regulations and them coming into force.

We are not clear as to the transitional arrangements proposed for commencement, for example will the new requirements apply to properties that have received planning permission but have not yet commenced building works by the coming into force date. Clarity on this and other transitional matters is required urgently as it will be essential to effective implementation. Although fire suppression systems are already included in our multi-occupancy dwellings we are already tendering with building contractors to build housing on or after Spring 2014 and it is not clear to us whether the regulations will apply in this respect, and what the requirements will be.

Question 8 – relevance of National Occupational Standards

We do not have sufficient information to be able to respond as to the relevance of the NOS, but we recognize the importance of ensuring there is an appropriately trained and skilled workforce in place to install and maintain the systems. We welcome the commitment to ensure that whatever standards are used, these are reviewed and updated to accommodate the legislation.

Question 9 – sources of training

Again, we are not in a position to comment on the sources of training. We fully support appropriate training, and ensuring the training is available to a wide range of practitioners. This is to avoid monopolies developing, where only a few companies have suitably trained and qualified operatives.

We are concerned that there is now insufficient time to ensure that colleges and other educational institutions revise their syllabuses to provide appropriate training to the workforce, given the regulations will not be made until September 2013 (start of the new academic year) and will be in force in April 2014. We would urge the Welsh Government to find an effective solution to this potential gap.

Question 10 – proposed changes to Approved Documents

We do not have any comments on the detailed changes made, but welcome the Welsh Government's approach to bringing the documents up to date and to reflect the forthcoming changes.

Question 11 – cost benefit analysis

We are not in a position to comment on the potential benefits detailed in the RIA, but note within our current developments the costs of installation per dwelling are significantly higher than those quoted in the RIA. We are also aware of anecdotal evidence from other RSLs that our experience is far from unique. Costs of £40,000 have been incurred by installing a tank based sprinkler system to a 6 bungalow scheme currently on site. This is significantly higher than the initial cost benefit analysis.

Question 12 – main risks and issues

We do not consider that sufficient detail in relation to water supply and the willingness of water companies to engage with housing developers has been included.

Adequate smoke detection is an essential element of fire safety, and we note that in a recent stakeholder event (Cardiff, 7 May 2013) questions were raised about the effectiveness of sprinkler systems in responding to "cold smoke". Those asking the questions indicated that there is the potential for occupants to be overcome by the smoke before the system is activated. We do not consider this is adequately dealt with in the RIA.

Question 13 – additional information

No comments.

157-17935 - CITB-Construction Skills Wales comments

CITB-ConstructionSkills Wales response to the Implementing the Domestic Fire Safety (Wales) Measure 2011 Consultation

CITB-Construction-Skills Wales welcomes the opportunity to respond to the Welsh Government's consultation on implementing the Domestic Fire Safety (Wales) Measure 2011. The construction industry in Wales remains committed to ensuring the highest standards of safety in our products and services, implemented in the most effective manner.

Concerns expressed by the construction industry over the cost and regulatory burden of the Domestic Fire Safety (Wales) Measure 2011 have been well rehearsed and are not repeated here. However, with regard to implementing the measure, several points should be considered:

- With regard to the proposed list of residences to which the measure would apply, the cost benefit analysis of residential sprinklers for Wales, published by the Welsh Government (30 May 2012) indicates that that installing fire sprinklers in newly built single occupancy dwellings is not cost effective. However there is a stronger case for installing sprinklers in multiple occupancy premises
- Focussing on new build properties, at the expense of older premises, ignores evidence which suggests that older properties are where the majority of incidents occur
- Numerous members of the industry have expressed concerns as to the danger which sprinklers might add where domestic fires are caused by chip pan fires
- There are concerns that sprinkler systems will not be maintained properly, and may even be disabled by homeowners – particularly in a context where anecdotal evidence suggests that insurers will not cover false alarms (such as burnt toast setting of smoke alarms)
- Delayed or phased implementation of the measure will allow the construction sector in Wales to adapt to the new requirements and respond effectively to any teething problems which become evident

Whilst the Domestic Fire Safety (Wales) Measure 2011 is now on the statute book, it is important that it is implemented in a way which guarantees that the legislation achieves its original purpose, whilst simultaneously minimising the regulatory and financial burden on the construction sector.

About CITB-ConstructionSkills Wales

CITB-ConstructionSkills Wales is the Welsh arm of the Sector Skills Council and Industry Training Board for the construction industry. Our membership includes 10,000 construction companies across Wales, with 4,000 employers actively engaged through our regional construction fora. We are working to ensure that construction employers have the right skills, in right place, at the right time by

investing funds and providing a wide range of industry-led skills and training solutions.

158-17935 - Defence Infrastructure Organisation

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: Tracy Price

Organisation (if applicable): Defence Infrastructure Organisation

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes x☐
No ☐
Comments:

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes ☐
No x☐
Comments: This seems to be a blanket approach to all residential premises and does not seem to be risk targeted.

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes x☐
No ☐
Comments:

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes x☐
No ☐
Comments:

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes ☐
No x☐
Comments: Without an adequate maintenance regime there is a risk that the system will be in operable when required. I agree with the observations raised in paragraph 131. I would have serious concerns if the installation of fire suppression was used to mitigate against a poor design where the operational effectiveness of the system could not be guaranteed. Occupiers and building designers will become reliant on a system that may be inoperable when required. Are there currently enough trained individuals to carry out maintenance testing for the volume of new installations proposed? If so what registration/qualifications will these individuals/companies need to have?

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes x☐
No ☐
Comments: Unless this is a mandated requirement I cannot foresee that the majority of householders will adhere to this maintenance regime. For rented properties it could be made a legal requirement for the landlord to carry out regular maintenance and servicing as is the case for gas boilers/fires

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes x☐
No ☐
Comments:

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[61] remain relevant given the proposals covered by the new legislation?

Yes x☐
No ☐
Comments:

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes x☐
No ☐
Comments: Assurance would need to be provided that the training was targeted towards the residential sector.

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes x☐
No ☐
Comments: Some of the subtle changes could get over looked by designers working in England and Wales. This would also be an issue for developers working under Building Notices.

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes x☐
No ☐
Comments: It is interesting that the CBA indicates that it is not deemed cost effective to install sprinklers to the majority of the building types the consultation proposes to install them in.

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes x☐
No ☐
Comments:

[61] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

1. The statistics given for deaths through fire have not been expanded to indicate how many of those would have been saved if sprinklers had been fitted. Could some of those been reduced if smoke alarms had been fitted or by improving means of escape within buildings by the introduction of fire doors etc.
2. What consideration has been given to the risk of Legionella?
3. What consideration has been given to smoke ventilators as occupants are most often killed by the hot toxic smoke rather than the fire.
4. Consideration should be given to controlling replacement windows so that all replacements have to be means of escape windows.
5. Although immune from the requirements of the Building Regulations MOD chooses to comply with the requirements of the Building Regulations by adopting the Approved Documents as mandated design solutions. This substantial variation in the requirements between England, Scotland and Wales poses operational issues on new build design and maintenance as often one contractor is employed to deliver this service through out the UK.
6. There is a severe risk that in much of our Single Living accommodation and Service Family accommodation vandalism to the sprinkler system and the subsequent damage will cause an additional burden to our maintenance budget and schedules.
7. I concur that sprinklers systems are beneficial in certain building types where the fire risks are high eg HMO’s and Nursing Homes (where occupants are slow to evacuate). I do not believe that the evidence provided for other building types supports their installation.

161-17935 - Care Forum Wales

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: Melanie Minty

Organisation (if applicable): Care Forum Wales

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes ☐
No ☐
Comments:

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes ☐
No ☒

Comments: The restriction of the measure to residences for "living and sleeping" fails to protect some of our most vulnerable citizens and fails to address the more high risk areas. The impact assessment suggests that the changes will save less than one life over 40 years in care homes. If there is genuine commitment to reducing deaths in fires, a supplementary measure is needed to extend the legislation to cover temporary accommodation, including hospitals, hotels and hostels.

If, on the other hand, the measure is specifically intended to apply to normal "living and sleeping" accommodation then care homes do not fall under that category. Normal accommodation is not fitted with automatic door closers, but all care homes are. It should not be necessary to install a fire suppression system in addition to the door closers, which some of our members feel to be a better option for supervised accommodation.

We would also point out that many nursing homes are more akin to the old cottage hospitals to which the regulation does not apply, which further highlights the inconsistency of the measure.

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes ☒
No ☐
Comments: This seems a practical approach, although it is not entirely satisfactory to rely on a system that is not fully compatible with the water supply and requires additional infrastructure. Better solutions need to be developed in the long term.

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes ☒
No ☐
Comments: The guidance should be future proofed by building in flexibility to refer to future systems that may improve upon the sprinkler system.

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes ☒
No ☐
Comments: We agree that regulation is not appropriate, especially given that many systems will be dependent upon the efficiency and working of tanks and pumps.

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes ☒
No ☐
Comments:

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes ☐
No ☒
Comments: Care Forum Wales believes that there are issues which have not been satisfactorily resolved, making the timeline unviable and potentially unsafe (see questions 9, 12 and 13).

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[62] remain relevant given the proposals covered by the new legislation?

Yes ☐
No ☐
Comments:

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes ☐
No ☒
Comments: There is a danger that sources of training will be insufficient to cope with demand both for installation of sprinkler systems and for carrying out inspections. The experience of our members in the social care system is that qualifications are often delayed by the absence of sufficient numbers of qualified assessors. It does not appear from the consultation document that the demand for training and assessment is sufficiently understood at this point.

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes ☐
No ☐
Comments:

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

[62] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes ☐
No ☒
Comments: The cost benefit analysis is based on reported figures of fire that do not differentiate between new and old builds, whereas it is quite likely that most serious fires occur in old buildings. It is therefore conceivable that the regulations will result in additional cost without realising the intended benefits.

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes ☐
No ☒
Comments: The impact assessment does not fully address the risks and issues as they will impact specifically upon the care sector. This is covered in further detail at question 13.

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

Care Forum Wales is the main professional representative organisation for the independent health and social care sector in Wales, with over 450 members who provide services that include looked after children, people of all ages with mental health and physical disabilities, the elderly infirm and those with dementia. Our members include many who provide residential care and nursing services.

Care Forum Wales supports the Welsh Government's aim for saving lives, but we are concerned that the measure as it stands is half-hearted in its scope by failing to include temporary accommodation. We are also concerned that the underlying assumption, that installing sprinkler systems in new builds, is unsafe since data cannot differentiate between old and new builds. In other words, there could be no actual benefits to the measure.

Members have expressed concerns that the removal of door closers is proposed as a partial solution to offset the cost of sprinkler installation. Experience has shown that door closers are a necessity to reduce the damage and danger from smoke. Indeed, we would suggest that where door closers are already fitted, a fire suppression system should not be required.

The benefits cost analysis confirms that there will be considerable additional cost up front. There is already considerable financial risk involved in setting up or expanding a care provision. Many home owners report difficulties in obtaining finance. Home insurance premiums have increased out of proportion in view of press coverage of neglect and abuse in a minority of

homes. Commissioning authorities are generally failing to pay providers the level of fee they require in order to provide high quality, person centred services. Many provisions struggle to be financially viable, let alone to see a reasonable return on investment. The additional set up costs for new builds is a disincentive to providers to enter or expand in the current market.

The information about water supply is sketchy and inconclusive, but it seems likely that flow and pressure in most areas will be low enough to dictate the installation of a tank and pump. This means not only additional cost, but additional requirement for providers to maintain the system and arrange annual inspections. In an area that is already heavily regulated, this adds yet another layer of bureaucracy and inspection that takes providers away from caring activities and acts as a further disincentive to enter the market.

Care Forum Wales would like a firm assurance from water companies that applications to install equipment will be dealt with positively and speedily to avoid delays in new settings becoming operational. Such delays are likely to be augmented by the lack of adequately trained installers.

In all the additional costs and disincentives to join the market could have a major impact on both quality of provision and capacity at a time when we know that we have a growing older population with higher dependency needs.

Care Forum Wales is happy for this response to be made public.

162-17935 - Bovis Homes Ltd

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: Michael Black
Group Development Director

Organisation (if applicable): Bovis Homes Ltd

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

No

Comments: Whilst Bovis Homes agrees that it is important to consider safety in the home, current Building Regulations are both sufficient & proportional to the issues. The consultation & IA have not demonstrated that this measure is cost effective or proportional & there is, we believe, a lack of empirical evidence supporting this measure. Indeed we would contend the information contained in the consultation supports no change to the current Regulations for a number of important reasons:

- The measure will apply to a very small proportion of the Welsh housing stock – only new homes. The measure will therefore take many, many years to implement.
- Consequently any death or injury occurring in existing homes will specifically not be prevented
- The consultation has not identified if homes built from 1992 when existing Fire Safety provisions were introduced are the primary source of deaths in homes – without this analysis the consultation fails to meet its own objective as to effectiveness
- There is no analysis of the effectiveness of the current requirements such as smoke & heat detectors or fire doors that apply to new homes currently.
- There is no evidence provided demonstrating that this measure will prevent any fire related death as there is no analysis of which types of homes (new, existing or older stock) are involved in fire related injury Given the importance of the issue the measure is seeking to resolve it is surprising that the Welsh Fire Service is unable to provide this data and

we note that this information has not been provided despite the request of the Legislation Committee in seeking such evidence.

- The Impact Assessment however seems to suggest the Committee did receive evidence that this measure would 'eradicate fire deaths in Wales'. This statement is not collaborated by any other evidence nor, we believe, can it be substantiated.

It cannot be appropriate therefore to introduce legislation with the significant cost to the home building industry without reliable & robust evidence and we cannot therefore support the measure at this time.

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

No

Comments: As outlined in our response to Q1 the evidence & information relied upon in the consultation makes it impossible to determine what effect the measure would have at all. This is further compounded by the fact that the Welsh Government has not detailed its reasoning for restricting the measure only to new residences and then to define the application further. If the Welsh Government are satisfied that the measure can be restricted to this list it must have evidence upon which it has made that decision. We cannot find such justification in the consultation or IA.

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes subject to ……
Comments: We believe it to be appropriate to base the measure on BS 9251 as this standard is used elsewhere in the UK however there are issues with the use of this Standard. The first is that BS 9251 requires specific flow & pressure rate, this cannot be (or moreover will not be) guaranteed by Water Companies. Consequently it is unlikely that any designer will take responsibility for the suitability of a direct mains fed solution leaving only a pump and tank solution.
Secondly as the designer will need to satisfy the flow/pressure rates at all times (as required by BS 9251) then the designer will be compelled to introduce a maintenance/servicing requirement into the design. This will have to be adopted by the home owner but our experience in respect of the servicing of safety critical equipment (for example gas installations) is that home owners rarely undertake this, rendering the provision unworkable.
In both cases the measure needs to build upon the requirements of BS 9251 in order to be effective and the consultation must be redrafted to reflect the real situation and not falsely suggest that there are other options. There is not a realistic alternative to a pump & tank solution and thus there is considerable

re-design & costs associated with this sole solution. The IA however has not taken these requirements into account and is consequently deficient.

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes this seems a sensible approach particularly given the comments in relation to Q3

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

No
Comments: The Welsh Governments proposal 'require(s) that each residence (to which the Measure applies) must be provided with an automatic fire suppression system***, that the system is operating effectively*** and that the fire suppression system complies with such requirements as may be prescribed by Welsh Ministers.'
We are unclear how the Welsh Government intends that the 'system operates effectively' without ensuring that any system is maintained. Indeed we would contend that home owners may assume that the maintenance of such systems is optional rather than optimal and the measure rendered counterproductive. Furthermore without adequately considering how systems are maintained the Welsh Government could expose itself to action in the event that a death occurs in a home with a fire suppression system that was not maintained.
This omission does not appear to support the Welsh Governments conviction that this measure will 'eradicate fire deaths in Wales'

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

No
Comments: See comments in relation to Q5. Fire suppression systems must be maintained to ensure effectiveness. To not legislate for this is a clear weakness in the measure. Simply encouraging householders is wholly inappropriate & leads us to believe that this measure has not been properly & fully worked through.

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

No
Comments: No we believe the Measure has not be adequately or properly considered, the proposals deficient in a number of cases, the costs significantly under estimated & the benefits assumed without properly analysis of penetration & impact over stated. Indeed the work undertaken by BRE demonstrates conclusively that the cost benefit analysis is not made.

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[63] remain relevant given the proposals covered by the new legislation?

No
Comments: Without the issues raised in our response being addressed, no Competence or Training requirements will bridge the considerable omissions & gaps in this proposal.

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

No
Comments: See our response to Q8 above

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

No
Comments: The requirements appear to reference BS 9251 on many occasions as to being mandatory within the AD's. We have grave concerns that the proposals are so deficient in many areas that simply relying on BS 9251 will not provide the outcome the Welsh Government seeks.

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

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[63] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

No
Comments: Without considerable redrafting the measure simply will not work nor provide the solution the Welsh Government seeks. It follows therefore that the IA does not adequately consider all the costs.
The IA assumes that a main fed direct system is available – it is not & consequently the IA miss-represents the true cost of the measure.
We provided evidence in the original consultation that the cost of installing a sprinkler system in a small/average size home would be c£5000 per plot. This is significantly higher than the IA assumes.
We do not believe that the IA can be considered sound & reliable.

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

No
Comments: We believe strongly that the RIA has specifically been drafted to place an un-balanced view on the risks & issues and has underplayed those risks.

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

163-17935 - Llanmoor Homes

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Matthew Grey

Llanmoor Development Co. Limited

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes
No X
Comments:
The purpose of the legislation is to reduce deaths and injuries caused by fire in homes, which we fully understand is an important issue that needs addressing. However, with 1.3 million households in Wales (census 2011), the implementation of this legislation will still only account for a very small proportion of households even after the 50 year period Welsh Government (WG) have based their cost benefit analysis on. It is stated by WG that the implementation of sprinklers will save 35 lives over the next 50 years, equating to a 5% reduction in the total deaths over this period. However, this is based on evidence which is lacking in accurate in depth data e.g. How many homes with working hard wired smoke detectors. If the data is not available to prove the implementation of compulsory hard wired smoke detectors in new homes from 1992 has made a difference or not. How can it be proved that the implementation of sprinklers is the sole reason for the saving of these 35 lives. Surely some of these saved lives could be attributed to hard wired detectors
Also, of the deaths that occurred in homes with smoke detectors (hard wired or not). How many were due to the detector not working? It is all well and good to have a fire prevention/alarm system in place. However, they must be maintained at all times. This goes for sprinklers as well as smoke detectors.
Any changes must be implemented via a robust system to ensure compliance. The use of Part B of the building regulations would be the best system to use as it is already in place and would only require alteration to cover the new requirements of the legislation. However, as Part B of the Building Regulations suggests BS 9251 as the standard for fire sprinklers, this goes

against the comments made by Welsh Government Ministers, AM's and officials, who have on numerous occasions suggested sprinkler installations will not necessarily be required to meet such rigid standards and that a system could be fitted by such persons as plumbers rather than certified sprinkler installation companies. Without strict regulation on the type of installation, there will be no guarantee the installation will work effectively at the time of need.

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes
No X
Comments:
If the purpose of the legislation is to save lives from fires, all types of residences should be included whether the stay if for a long or short period. Evidence from the USA has proved that other than kitchen fires, most fire deaths occur between 12am and 5am, whilst occupants are asleep. Any place that accommodates persons overnight should therefore be covered by this legislation. In addition, some of the categories not included house vulnerable groups of varying kinds under one roof, in addition to potentially large groups of people with limited mobility. This goes against the WG remit to reduce deaths by fire in homes.

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes X
No
Comments:
Along with Part B Building Regulations, standard guidance such as BS9251 must be available to ensure that installed systems will do what is required of them when necessary. However, by following BS9251, this may cause a number of issues. The BS standards allows for a number of ways to feed sprinkler systems, however, all systems have their issues. Pump and tank systems in standard 2 storey homes is not a viable option due to the amount of stored water required to generate the required flow rate. The addition of large tanks in the roof space will require a major rethink in the design and engineering of homes along with the additional structural costs that are inevitable.
The alternative, a mains fed system equally creates a problem of ensuring enough water flow. Dwr Cymru Welsh Water (DCWW) will not guarantee the required flows to meet BS9251, plus current domestic water meters do not allow such flow rates. This last fact could require every new home to have an additional non metered supply. This supply could be open to abuse.

Additionally,a DCWW connection currently costs approximately £900. With an additional connection,will this incur another charge of £900? This is highly likely. The current estimate of £3200 for a sprinkler system has in no way taken into account any of these additional costs.
On new developments, it is not possible to test flow rates until the property is built. What happens when on installation of the sprinkler system, the flows do not meet the requirements. Retrofitting pumps and tanks is not straightforward and will be expensive. The purchaser of any new home will understandably want to ensure they have a fully working system in place before completing on the purchase.
Although the sprinkler system may comply on installation, changes in flow/pressures in the water mains do happen due to many reasons. What happens when these rates drop below the required BS. If the system is subsequently inspected, it will fail to meet the required standard. Who is responsible to sort the problem or worse still, what if there is a fire and the system does not work. Who is responsible? The installer? The builder? The water authority? In this sue culture, someone will be blamed and legal proceedings will inevitably be brought against whoever is seen as responsible.
It is only right that if a person has a sprinkler system in their home, that they expect it to work in a time of need.

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes X
No
Comments:
In time, systems will inevitably be available which meet BS 9152. The legislation must be flexible enough to allow these systems to be used if they comply with the British Standard

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes
No X
Comments:
To ensure that systems continue to work and save lives, any sprinkler system will need to be maintained regularly. It is commonly known that home heating systems should be regularly serviced, however many are not. Many will only do something when it breaks down and the home has not heating/hot water. If a sprinkler system is not working the occupier will firstly be unaware and secondly will most likely not worry about repair as it is not affecting their daily lives.

In the same way that it is a legal requirement to have an MOT on a vehicle to ensure its roadworthiness. It is essential that sprinkler systems are maintained to ensure they work if needed. It is clear within the fire statistics that smoke detectors are often present but are not working in homes. Without suitable regulation to maintain sprinkler systems, similar statistics of failed activations in fires will appear in the future.

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes X
No
Comments:

See above.

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes
No X
Comments:
We do not believe the proposed approach has been properly thought through and therefore we do not believe the regulations should be changed on the dates suggested

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[64] remain relevant given the proposals covered by the new legislation?

Yes
No
Comments:
No comment

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes
No
Comments:
No comment

[64] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes X
No
Comments:
We agree that following a British Standard such as BS9251 is a sensible requirement. However, WG consultation documents have on numerous occasions contradicted these requirements. These must be addressed before the regulations are made and that any regulations adopted must be robust enough to ensure that where a sprinkler system is installed, their operation is efficient , effective and strictly in line with the proper specification.

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes
No X
Comments:
Please refer to the House Builders Federation (HBF) consultation response which we have contributed to and fully endorse.

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes
No X
Comments:
Please refer to the HBF consultation response which we have contributed to and fully endorse.

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:
We would like to re-iterate that along with the changes to Part L Building Regulations, social housing requirements and Section 106 requirements. The implementation of this legislation will make many areas of Wales unviable for development. These will include many areas affected by social and economic deprivation which desperately need the investment and jobs that homebuilding brings to areas.
As a Welsh family owned and run house builder, who has built many thousands of homes and invested many millions of pounds in the South

Wales Valleys in our 47 years of trading, it is alarming to see the increasing cumulative burden of regulation effecting our industry and the economy within Wales. It is a well known fact that investment in construction creates a 4 X multiplier effect for the economy. WG have aspirations to stimulate the economy and provide much needed homes, which we welcome. However, this will not be possible if the current plethora of regulation requirements continues.

164-17935 - The Chartered Institute of Plumbing and Heating Engineering

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: John Griggs

Organisation (if applicable): Chartered Institute of Plumbing and Heating Engineering (CIPHE)

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes ☐√
No ☐
Comments:

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes ☐√
No ☐
Comments:

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes ☐√
No ☐
Comments:

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes ☐√
No ☐
Comments:

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes ☐
No ☐√
Comments: Although such a requirement is difficult under Building Regulations, a suitable vehicle should be found to maintain confidence in such systems. Such maintenance should be undertaken by a professional and possibly linked to the household insurance so that those who do not have regular professional maintenance on their systems are penalised in someway.

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes ☐√
No ☐
Comments: This will inform the householder and give them an understanding of what the professional maintenance person is carrying out.

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes ☐√
No ☐
Comments:

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[65] remain relevant given the proposals covered by the new legislation?

Yes ☐
No ☐ √
Comments: The NOS is far too complicated for a simple domestic system and much of the content is about customer relations and issues that do not

[65] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

directly impact domestic sprinkler systems. That the suite is currently 107 pages long, with just the titles of the items listed, indicates that it is inappropriate and needs to be made far more concise.

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes ☐
No ☐√
Comments: Appropriate training needs to be provided. People should not be expected to have to be trained to install industrial and commercial systems when they only intend to install domestic systems. CIPHE has an Education and Training Group that would be pleased to help develop suitable courses as the Institute has been working towards the installation of domestic sprinkler systems in the UK for many years.

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes ☐√
No ☐
Comments:

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes ☐√
No ☐
Comments: As this is a new proposal for the UK accurate values will be impossible at this stage. However, the maintenance cost per flat of just £5 (centre of page 9) does seem very low and not really viable for a professional to undertake.

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes ☐√
No ☐
Comments: Once there have been a reasonable number of actual installations carried out, the figures could be reviewed in the light of experience and the scope of the legislation adjusted appropriately, if required.

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:
The CIPHE has a well established register of plumbers and many members in Wales. We would be pleased to contribute to future policy Regulation development that could impact plumbers and heating professionals in Wales. More details about the CIPHE can be found on our website www.ciphe.org.uk

165-17935 - Barratt Developments PLC

Consultation on Domestic Fire Safety (Wales) Measure 2011

Consultation Response Form

Your name: Danielle Michalska

Organisation (if applicable): Barratt Developments PLC

email / telephone number:

Your address:

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

Yes ☐
No ☒
Comments: No, the main purpose of the proposed changes is to reduce the number of deaths and injuries caused by fires. The figures provided in the consultation are not wholly representative. There is currently limited data evidence provided to identify whether or not it is newly built homes with improved fire safety measures installed, or the older stock without such measures that is the main cause of the problem. It can therefore be questioned, is it reasonable to stipulate that new residential properties must contain fire suppression systems?

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

Yes ☐
No ☒
Comments: No, the Ministerial Foreword to the consultation recognises that these systems will impose additional build costs, which comes at a difficult time for the construction industry. These costs have been balanced against loss of life and injuries to householders and fire fighters, together with the cost of damage from fires. The BRE work concluded that sprinklers are not cost effective for single occupancy houses; and therefore should such a dwelling type be excluded from the proposed list of residences?

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes ☒
No ☐
Comments: Yes, this would then allow for an appropriate standard to be adhered to by all. However, we do have a concern with the BS requirements. BS 9251 requires that a specific flow rate is achieved by sprinklers for optimum efficiency. In order to comply with this local water companies would need to guarantee pressure and flow rates. The water supply companies have obligations and requirements for the supply of water for domestic purposes, under the Water Industry Act, but the use of water for fire fighting activities is not seen to be a “domestic purpose” within the Act. There is therefore no obligation, or requirement, for water supply for automatic suppression systems. Reliability of suitable water supply is fundamental to the successful operations of the sprinkler system and therefore under the BS a pump or pump and tank would need to be the supply option. Pumps and tanks lend themselves to a range of issue, from cost through to maintenance.

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes ☒
No ☐
Comments: Yes, this seems to be a reasonable approach offering some flexibility to developers.

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

Yes ☐
No ☒
Comments: As previously stated, the objective of the consultation is to reduce number of deaths and injuries caused by fires. We question if end users are likely to accept ownership and responsibility to ensure that a suitable and regular maintenance programme is in place. We acknowledge that there is a significant risk that sprinkler systems will not be maintained, particularly as other systems such as heating and boilers are often neglected.

Question 6: Do you agree with the proposal to produce a householder’s guide to encourage the maintenance of fire suppression systems?

Yes ☒
No ☐

Comments: As per the comments stated in Question 5. It is consider crucial that householders are aware of the maintenance required for systems to work efficiently and effectively.

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

Yes ☐
No ☒
Comments: No, transitional arrangements should align with standard transitional arrangements. The time between release of regulation and the commencement should not be shortened. Rather in instances such as this consultation which raises numerous issues and concerns, the transition period should in fact be increased to allow time for associated issues to be addressed.

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[66] remain relevant given the proposals covered by the new legislation?

Yes ☐
No ☐
Comments: No Comment

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

Yes ☐
No ☐
Comments: No Comment – uncertain of current competence person schemes available if any.

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

Yes ☒
No ☐
Comments: Yes, although from reviewing the proposed changes and other consultation documentation it seems that provided a sprinkler system is

[66] The suite of NOS for Mechanical Fire Protection is available at: http://www.skillsforsecurity.org.uk//download.php?fileid=493

installed, whether or not the system is functioning properly doesn't seem to be an issue. This needs to be addressed before the regulations are made. The purpose of the regulation is to prevent injuries and death, it is clearly fundamental that such systems are installed correctly offering reliability of flow and volumes, at suitable flow and pressure rates, to successfully reduce the number of deaths and injuries. Therefore, any regulations that are adopted in Wales must be robust enough to ensure systems are installed are efficient, effective, and in line with appropriate standards.

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

Yes ☐
No ☒
Comments: As mentioned in question 2 the cost benefit analysis clearly demonstrates that installing fire sprinklers into new 'homes' would not be cost effective.

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Yes ☐
No ☒
Comments: The impact assessment requires additional evidence to form a more robust analysis and viability. For example there is limited information provided around the maintenance required for such systems and the associated costs. The overall costs of maintenance could have huge implications in the overall impact assessment. Therefore, the impact assessment must consider all areas of the proposed legislation.

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

No further comments

169-17935 - RICS

Building Regulations Consultation
Construction Unit
Housing and Regeneration Directorate
Welsh Government
Rhyd y Car Offices
Merthyr Tydfil
CF48 1UZ

June 2013

Dear Sir,

Implementing the Domestic Fire Safety (Wales) Measure 2011

Thank you for the opportunity to respond to the consultation dated 25 March 2013.

RICS Wales is the principal body representing professionals employed in the land, property and construction sector and represents some 4000 members divided into 17 professional groups. As part of our Royal Charter we have a commitment to provide advice to the Government of the day and in doing so we have an obligation to bear in mind the public interest as well as the interest of our members

Our detailed response to the Consultation is as follows:

Consultation on Domestic Fire Safety (Wales) Measure 2011

Chapter 2 Proposed approach

Question 1: Do you agree with the proposed approach (set out in paragraph 20) of implementing the Measure through commencing section 1 of the Measure and through making required changes to the Building Regulations?

No, paragraph 14 states "It is important that new regulations avoid undue burden and additional, unnecessary administrative costs. It is also important that the regulatory route chosen is familiar to those who will administer and enforce it, is known to be effective, and enjoys the trust and confidence of all stakeholders." In the current market these proposals may have potential to adversely affect against these objectives.

Question 2: Do you agree with the proposed list of residences (set out in paragraphs 28 and 31) to which the regulations should apply?

No comment.

Chapter 3 Design, testing and installation of residential fire suppression systems

Question 3: Do you agree that the guidance should refer to BS 9251 as the main standard by which the regulatory requirement can be met?

Yes.

Question 4: Do you agree that the guidance should retain the flexibility to refer to other fire suppression systems when such systems achieve a British Standard?

Yes.

Chapter 4 Maintenance of residential fire suppression systems

Question 5: Do you agree with the proposal not to regulate to require the maintenance of fire suppression systems?

No. If the purpose is to ensure a sustained improvement in fire safety it would seem at variance after any enactment not to ensure periodic inspections to avoid neglect. Operability could be assured at least occasionally by a means similar to the way owners need to be able to show works to electrical systems in bathrooms and kitchens have been undertaken by a competent person upon a sale – in this case, people wishing to sell/let a property could be required to produce a certificate of adequate operation to show sprinklers are working.

Question 6: Do you agree with the proposal to produce a householder's guide to encourage the maintenance of fire suppression systems?

Yes but it should be noted many are likely to get lost or overlooked.

Chapter 5 Commencement

Question 7: Do you agree with the proposed approach to commencing the changes to the Building Regulations?

No.

Chapter 6 Industry Competence and Training

Question 8: Do you agree that the suite of National Occupational Standards covering Mechanical Fire Protection[67] remain relevant given the proposals covered by the new legislation?

No comment.

Question 9: Do you agree that existing sources of training will remain fit for purpose when the new legislation is implemented?

We feel that a specific consultation on this point with stakeholders would be best to provide a sure basis to any decisions regarding existing training capacity.

Part 2 Proposed amendments to Approved Documents

Question 10: Do you agree with the proposed changes to the Approved Documents?

No.

Part 3 Regulatory Impact Analysis & Cost Benefit Analysis

Question 11: Do you agree that the cost benefit analysis is a reasonable estimation of the estimated costs and benefits of the proposed regulations?

RICS Wales would only comment that while we strongly understand the motive behind these proposals we feel a further factor to the cost/benefit analysis needs to be considered namely the effect on the Housing market in Wales should Wales proceed while England does not.

Question 12: Do you agree that the Regulatory Impact Assessment has correctly identified the main risks and issues associated with the proposed regulations?

Please see answer to question 11.

Question 13: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

Please enter here:

RICS Wales has concerns that these measures are being considered only in their own right rather than as part of an overall framework of recent or proposed regulatory measures affecting the Housing and Construction markets in Wales. The code for sustainable homes along with changes to building regulations along with these proposals gives us some pause about any potential disparity in land values and the cost of development between Wales and England. With the bulk of the Welsh population being geographically quite close to England significant disparities are likely to have greater effect than they would in other devolved nations in the UK. In addition market conditions although improving are still a long way from full recovery. With the existing costs of local authority106 and CIL obligations we wonder whether if these measures are to be introduced whether overall it should be introduced in the immediate near term in the current economic environment.

If you have any queries in respect of this response please do not hesitate to contact me.

Yours sincerely,

David Morgan
Policy Manager