**DFS 22** 

#### **Legislation Committee No.1**

## Response to the consultation on the Proposed Domestic Fire Safety (Wales) Measure

**Community Housing Cymru** 

Cartrefi Cymunedol



Community Housing Cymru (CHC) is the membership body for housing associations and mutuals in Wales. Our members provide over 120,000 homes (as at May 2010) across all the local authorities in Wales. CHC exists to enable housing associations and community mutuals to work effectively and flourish in Wales.

Cvmru

Our vision is to be a:

- dynamic, action based advocate for the not-for-profit housing sector.
- 'member centred' support provider, adding value to our members' activities by delivering services and advice that they need in providing social housing, regeneration and care services.
- knowledge-based social enterprise.

Our charitable objectives are to:

- Promote the voluntary housing sector in Wales
- Promote the relief of financial hardship through the sector's provision of low cost social housing.
- Provide services, education, training, information, advice and support to providers of such housing in Wales.
- Encourage and facilitate the provision, construction, improvement and management of low cost social housing by housing associations in Wales.

Key priorities from our 2010-2013 Business Plan include:

- 1. Promoting the voluntary housing sector in Wales.
- 2. Promoting and encouraging innovation in the funding and delivery of social housing, and services to support members in a new regulatory system.
- 3. Promoting the relief of financial hardship by our members through the environment and action on fuel poverty, financial inclusion, and supporting people.

CHC and the social housing sector take the issue of safety very seriously. All measures that can assist in reducing risk to life and property should be carefully considered. In the past we have worked with the Welsh Assembly Government and other stakeholders to advise and guide our members on a range of fire safety issues and safety in the home more generally, and we continue to work hard with the Assembly to improve the quality of housing association homes. This is CHCs response to the consultation issued by the National Assembly and we look forward to the opportunity to give oral evidence to the Committee later in the month.

#### Response by Community Housing Cymru

Our response follows the questions detailed in the consultation

#### Questions 1 and 2:

Is there a need for the proposed Measure to deliver the aim of reducing the incidence of reducing the incidence of death and injury from fires in newly created residences in Wales? And

### Do you think the key provisions within the proposed measure will help to deliver the above aim?

Despite all of the advances made in modern living, fire continues to be a serious threat to life and property and CHC is pleased to see the National Assembly proposing action to deal with it. CHC welcomes the Assembly's intentions. We do have concerns about some technical and financial implications of the proposals but we also offer a solution to these and CHC would like to play an active and positive role in a partnership approach to help the National Assembly achieve its ambitions to improve domestic fire safety.

CHC supports any measure which reduces the incidence of death and injury from fires and agrees that initiatives by Government aimed at preserving life, preventing injury and safeguarding property are worthwhile. We would like to see the Assembly consider a number of issues in taking forward its proposals and hope that the Committee considers them as part of its remit to consider the general principles of the Measure.

#### Improving the quality of data on fire deaths and injury in housing

The Explanatory Memorandum estimates a current loss of on average 18 lives per year through fire in domestic properties in Wales, but the statistics do not provide any breakdown of the types of housing where these deaths occur, whether for example in Houses of Multiple Occupation, high rise property, sheltered housing and whether these deaths are of people in what we know as vulnerable groups.

The best way of reducing injury and death through fires in housing in Wales is to take a risk based approach to identify whether there is any relationship between fire risk and types of property and resident. It is widely believed that because new housing is designed and constructed to better standards of fire protection, many with appropriate fire and smoke detection included, that the greatest risk must be posed by older existing

housing. We would like to see the Committee consider the value in collecting and analysing more detailed information to help inform future policy and practice as the result might suggest a more targeted approach (which might focus on certain types of new and existing homes as well as certain vulnerable groups in society) would be more effective.

#### A practical way forward to tackling fire risks in housing

We are aware of the National Assembly's desire to have an impact on this problem and if the Measure is successful we would like to suggest that the National Assembly considers adopting a collaborative approach and looks to take forward proposals to install fire suppression systems in new homes in a number of pilot schemes. These would be aimed at resolving a number of questions housing policy makers and providers have with the proposed Measure and with its aim. We believe there would be widespread acceptance of an approach which sought to pilot the design, installation and maintenance of fire suppression systems in a range of new housing schemes, in small and larger scale, urban and rural, rented and owner occupied housing. Some of CHCs members have questioned the approach proposed by the National Assembly and in addition to the issue of risk referred to above, have identified a number of concerns they have regarding the technical feasibility of proving fire suppression systems in new housing (which we detail below).

Rather than list a series of problems and concerns in this evidence we think there is potential for finding a way of taking forward the National Assembly's initiative whilst at the same time bringing together all the key stakeholders to address the issues we identify below. We are convinced that the best way to get buy-in from everyone involved in new house building is to move forward in a collaborative way, involving everyone with an interest to get around the table and help iron out issues from the start. We would like to see the National Assembly take forward this Measure through a number of pilot schemes which bring together the Welsh Assembly Government, private housing developers, housing associations, water companies, fire and rescue services, fire suppression system suppliers and installers, local authority building control departments, tenants groups and other stakeholders.

Housing associations have a reputation for being creative and innovative businesses and the sector's commitment to safety has been shown by its programme of regular gas and electrical safety testing, its move to install mains powered smoke detectors in all its homes and its continued work in areas such as carbon monoxide testing. We think these pilots would offer opportunities to deal with the many practical issues and potential barriers in a way that might encourage clarity on water connection and pressure issues, a way of dealing with the legionella infection risks, better design of fire suppression sprinkler heads, the chance for association maintenance staff to be trained in servicing specialist equipment, opportunities for associations to work with private house builders on mixed tenure schemes to ensure homeowners get help with annual maintenance etc.

There is a useful precedent here. An Assembly Government funded pilot scheme was undertaken in Aberafon by Cymdeithas Tai Dewi Sant (which is now part of the Coastal Housing Group) in 2003. The objective of the pilot was to research the technical difficulties and cost of domestic sprinkler installation. The scheme consisted of nine new bungalows for people aged over 55, one of which included adaptations for a disabled user. The total cost of the sprinklers was approximately £46,000 - over £5,100 per bungalow (£2,200 for the sprinkler system, £626 for the related electrical work, £237 for related building work and £2,039 for the incoming water main). There were issues with guaranteeing water pressure (essential for the sprinklers to work) and much higher connection costs where Welsh Water demanded commercial connection fees. We understand a meeting was held with Welsh Assembly Government officials and the installers to discuss how the scheme might have been completed cheaper and what the long term liabilities might be. We understand that there were significant issues with water supply and with the guarantee of pressure. This has raised fears about the implications for fitting fire suppression systems in housing which we detail below.

This pilot was only undertaken in single storey accommodation and it seems that the opportunity to learn lessons from that exercise has not been fed into a development process. We consider it would be useful to design pilots which mirror the diverse nature of development schemes in new housing: small, infill schemes of two or three houses and flats, small scale rural schemes of 2 and 3 bed homes, larger schemes of 15-20 homes for rent and owner occupation. New house building is diverse in nature and the more examples which can combine a mix of the urban, rural, small, large, rented and for sale homes would help deal with the myriad technical issues. We would suggest agreeing some clear objectives for each pilot, a process for gathering and analysing data and appropriate evaluation, as well as involving an organisation with experience of carrying out this kind of exercise – such as the BRE.

In order to ensure these pilots are properly resourced we would like to see the National Assembly use its own funds to support the additional costs incurred in running these pilot projects.

CHC would be prepared to take an active part in getting these pilots off the ground.

#### **Question 3**

# What are the practical implications of the proposed Measure, in particular do you think that there are any potential barriers to implementing the provisions contained in the proposed Measure?

We think the Committee's remit to look at the general principles of the Measure should include the best way of ensuring its implementation can be assured and we have already suggested the idea of practical pilot schemes as a way of doing this. We think this is a realistic way of testing the Measure's effectiveness as it goes beyond the making of assumptions, the reliance on estimates rather than real costs and the hope that fire suppression systems will be maintained by homeowners. Real life testing also enables opportunities for creativity as detailed above. In relation to practical implications and potential barriers our members raised a range of issues:

- The provision and maintenance of a water supply of sufficient pressure to ensure fire suppression systems will operate. Dwr Cymru's evidence to the LCO Committee showed that more than half of the area of Wales has water supplies of uncontrolled pressure.
- Where pressure cannot be guaranteed, the expectation is that new homes will need a tank with sufficient stored water to supply a fire suppression system. This would mean that the building structure would need to be designed to hold the weight of a tank in the roof space. With so much of new home roof space likely to be used to accommodate solar heated hot water, mechanical ventilation and heat recovery ducting, there will be more design implications.
- There are fears that a store of water which remains unused for sometime presents a legionella bacteria risk, especially if the water is stored in a tank in a roof space at a temperature which encourages the growth of bacteria. Warnings are currently being given of the risk of legionella contamination in shower heads which are unused for some time and so fears of the release of contaminated water in a sprinkler head activation are not unreasonable.
- How to fund the cost of fire suppression system installation. Housing associations work within a funding environment which both limits the amount of grant to subsidise new development and which controls the rents associations can charge their tenants in order to repay the loans required to add to available grant. Schemes have to be approved by the Assembly through a system of comparing scheme costs against Acceptable Cost Guidance (ACG) which the Assembly updates. Associations are concerned that ACGs would need to accommodate the extra costs of fire suppression systems and any necessary oncosts required through stronger building structures, enhanced water connection etc. Any additional costs in new house building need to be funded and the need to fund the installation of fire suppression systems would come at a time when there are significant reductions in the available grant resources, calls for new house design to achieve higher standards of energy efficiency and carbon reduction – all at a time when tenants are likely to find it harder, not easier, to pay their rents. In the Explanatory Memorandum it is assumed that the additional costs of providing fire suppression systems will be deducted from the value of the land new homes are built on. Traditionally land values are discounted to take account of "abnormal costs". If this measure were to be adopted then it would not be considered an abnormal development cost and therefore it would not be taken account of in valuing land. We deal with cost in more detail under Question 3.
- How to fund the cost of maintaining fire suppression systems on an annual basis. The Explanatory Memorandum makes the assumption that housing association staff would be able to schedule maintenance as part of their regular visits to properties. The vast majority of associations out-source their maintenance to contractors and certainly maintenance of fire suppression systems would be

regarded as specialist in nature, as with fire alarm and extinguisher maintenance. We deal with some of the known costs of maintenance under Question 3

- There is a real fear that fire suppression systems fitted in homes sold into the private market (the vast majority of new homes) will go unmaintained. The Explanatory Memorandum makes reference to the estimated annual maintenance costs if one third of homeowners perform annual maintenance on their systems. There is a real fear that the two thirds or more who fail to regularly maintain their systems will mean the systems may not function when required to do so. All of our members who we spoke to about the Measure made this point that any initiative to provide fire suppression systems in new homes will only be as good as the number of homeowners who maintain them and they fear that most will go unmaintained.
- There are concerns about long term liability for the maintenance and repair of fire suppression systems, beginning with the provision of initial warranties at installation through the life of the system.
- There are concerns about ensuring the effective and continued education of residents about fire suppression systems, their use and maintenance. There are many myths and misunderstandings about what triggers the activation of a sprinkler system and what happens when they are triggered. There are fears about system abuse and also the water damage to the building fabric which might result from system use, which some fear may be as great as a fire itself.
- The development process has become more complex, time consuming and expensive with additional planning requirements such as design access statements, flood risk assessments, ecology reports and this proposal would place another submission and approval process as it would not be part of the Building Regulation approval process. This means more bureaucracy and more cost.
- We are advised that architects are now refusing to carry out fire assessments as part of their design commissions and so more specialists are likely to have to be brought in at installation stage. This will mean an increased on-cost.
- There are concerns that the storage of water for fire suppression systems will affect the assessment of schemes developed under the Code for Sustainable Homes. We are not aware that the Code yet incorporates any reference to fire suppression systems.
- A very real concern is that if the National Assembly proceeds to introduce this Measure it may cause feasibility problems and delays in schemes already in the process of being designed, approved for planning permission and building control approval or on site. We would hope that the National Assembly would accept the need for a period of transition in bringing in any Measure so that all developers could build into their schemes the implications of fire suppression system installation.

#### **Question 4: What are the financial implications of the proposed Measure?**

A range of uncertainties exist in relation to installation and maintenance costs as detailed above.

Looking at the wider context, it's not just technical issues which need to be recognised in the discussion of this measure. With pressures on the Welsh block grant, it is likely that the impact of the UK deficit reduction measures will be felt hard in Wales during the period of the next Assembly (2011-2015). This measure will essentially result in extra costs at construction for housing associations, as well as the pressure on being able to charge affordable rents (due to additional servicing) and several other considerations. Therefore, it is important that the Assembly Government is flexible in its approach towards affordable housing in these circumstances. Savings may have to be made elsewhere so that the overall approach could in the end be cost neutral. It may be that the Assembly has to accept the need to look more flexibility at all of the space and specification standards it sets for new houses in the social housing sector.

The individual cost estimates confirmed in the Explanatory Memorandum for the installation of an automatic fire suppression system highlight a figure of approximately  $\pounds$ 1,500 for a new affordable house. This estimate ignores the additional cost of providing a separate water service and meter to the system, which could add an additional £1,000 to £2,000 to the total installation cost, dependent on infrastructure. The figure of £1,500 is also based on several estimates whereas the figures CHC has previously quoted are actual costs of installation – from the pilot scheme in Aberafon.

One of our members advised us of recent discussion with two specialist installers which suggest that actual costs may be significantly higher than the £1,500 estimate. They advise that in addition to the fire suppression system itself, it is generally necessary to provide a larger water main or a storage tank and pump, to provide sufficient water pressure to operate sprinklers. The costs of these are estimated to be around £1,500-£2,500, so the total cost is between £3,000 and £5,000. This correlates more closely with figures provided by CHC of actual costs of £5,100 per bungalow incurred in the pilot in Aberafon. It is also our understanding that the Dwr Cymru ongoing maintenance costs for the additional service would be passed on to the end user, in addition to the standard installation annual maintenance costs.

The increased cost of individual installations, taking account of water service costs, would obviously have a significant impact on the projected per-annum totals quoted in the Explanatory Memorandum: of between £10 million to £17 million per annum total overall, and between £0.5 million to £3.3 million per annum total for housing associations.

CHC members provided us with the following information in relation to capital costs of fire suppression system installation:

- An extra care facility comprising 44 flats (1 and 2 bed) together with communal spaces - £118k plus £30k for trace heating and lagging of pipe work in roof spaces etc - £3,364 per flat
- Another extra care scheme the sprinkler system cost £100,000 for 49 1 and 2 bed flats - £2,040 per flat

• One of our members was also provided with information by an architects practice that the cost of installing a sprinkler system in a 2 double bed penthouse flat in Cardiff Bay was £6,500.

On the maintenance cost issue we have received the following information:

- £150 per annual visit for a 3 hour service on an extra care scheme in Pembrokeshire
- 64 flats in an extra care scheme in Neath. The service contract costs £800 plus VAT for annual servicing and maintenance (not including materials and other exclusions.) The association has pointed to the potential add-on costs as the maintenance contractor recommends sprinkler head replacement every 10 years, replacing single or double check valves every 2 years (cost between £40 £100 per valve) and replacing a larger valve every year at £150. The association is concerned about warranty infringement if it fails to make the recommended replacements and has pointed out that these add-ons can significantly affect the life time costs of the system.
- 1 large individual bungalow in Swansea where the service contract costs £290 per annum (plus VAT).

It's clear to us that there are very different costs, higher than estimated by the National Assembly. We think the pilot approach would help to bottom out these costs and provide a clearer picture of the cost of rolling out a Measure across all new house building.

#### Learning from experience

In addition to this evidence we have spoken to Selwood Housing, a housing association which owns the Studley Green scheme in Trowbridge, Wiltshire. What is particularly interesting about Studley Green is that it is an estate of 204 homes with sprinklers installed at construction in 2003. We were told that the sprinklers had activated 2 or 3 times in the last 8 years and in each case they had saved the properties (with estimated rebuild costs of £60,000) as well as the lives of their occupants. The existence of sprinklers helped with insurance and provided piece of mind for tenants and landlords. But tenants we were told didn't always appreciate the workings of the system and often painted over the sprinkler head on the ceiling. Each year the association had to replace many of these sprinkler heads and these were rechargeable items which tenants had to pay for. The administration system had to be robust to deal with this. Selwood Housing also said that finding qualified contractors able to carry out maintenance was hard and they could only find two which 'ticked all the boxes' in their opinion. An annual service involves checking pressure, valves and each sprinkler head, electrical parts, sensors and alarms. The association also had water softeners fitted and these also had to be checked. There are also stand-by batteries which need to be replaced. Some of the control panels are now, after seven years, out of date and are having to be replaced (they now need to be 24volt rather than 12volt). They've just replaced a control panel at a cost of £370 and this is likely to occur every 10 years. There are access issues - getting into properties to carry out the service. A service cost £80 per property plus any parts needing replacement. There haven't been any leaks. The water supply is under mains pressure so there was no stored water.

The association thought if sprinkler heads could be designed to be more unobtrusive avoiding the painting-over problem, the system shouldn't be any more problematic than electrical or gas servicing. But they said that dealing with the maintenance and the maintenance costs was the most challenging issue.

We think Selwood's experience is an interesting one. They clearly recognise the positive and negative implications of having sprinkler systems in these homes. They are willing to share their experience with anyone whose interested in finding out more. It might be useful for the Committee to take evidence directly from the association. It's telling that the association has not installed sprinklers in any subsequent development.

We would like to see the range of pilot schemes we have suggested above incorporate issues of maintenance and servicing so that issues such as the specification of service and maintenance contracts, warranties and concerns about the life of system components can be effectively evaluated. In fact a pilot might offer a housing association the potential for training one of its own staff to carry out the servicing and maintenance of fire suppression systems and so this might also be built into the design of a pilot scheme.

CHC September 2010