



**Cynulliad Cenedlaethol Cymru  
The National Assembly for Wales**

**Y Pwyllgor ar y Gorchymyn Cwmhwysedd  
Deddfwriaethol Arfaethedig ynghylch Diogelwch Tân  
Domestig  
Proposed Domestic Fire Safety LCO Committee**

**Dydd Mawrth, 29 Ebrill 2008  
Tuesday, 29 April 2008**

**Cynnwys**  
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      2008  
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Cofnodir y trafodion hyn yn yr iaith y llefarwyd hwy ynddi yn y pwyllgor. Yn ogystal,  
cynhwysir cyfieithiad Saesneg o gyfraniadau yn y Gymraeg.

These proceedings are reported in the language in which they were spoken in the committee.  
In addition, an English translation of Welsh speeches is included.

**Aelodau'r pwyllgor yn bresennol**  
**Committee members in attendance**

Peter Black	Democratiaid Rhyddfrydol Cymru Welsh Liberal Democrats
Mark Isherwood	Ceidwadwyr Cymreig Welsh Conservatives
Huw Lewis	Llafur (Cadeirydd) Labour (Chair)
Sandy Mewies	Llafur Labour
Janet Ryder	Plaid Cymru The Party of Wales

**Eraill yn bresennol**  
**Others in attendance**

Jane Davidson AM	Gweinidog dros yr Amgylchedd, Cynaliadwyedd a Thai Minister for Environment, Sustainability and Housing
David Hedges	Ymgynghorydd Polisi Tai Annibynnol (cyn-Ddirprwy Brif Weithredwr, Carterefi Cymunedol Cymru) Independent Housing Policy Advisor (former Assistant Chief Executive, Community Housing Cymru)
Richard Mann	Aelod o'r Bwrdd, Community Housing Cymru Board Member, Community Housing Cymru
Keith Pratley	Rheolwr Rheoliadau Dwr ac Effeithlonrwydd Dwr, Dwr Cymru Water Regulations and Water Efficiency Manager, Welsh Water
Francois Samuel	Pennaeth Uned Adeiladu, Llywodraeth Cynulliad Cymru Head of Construction Unit, Welsh Assembly Government

**Swyddogion Gwasanaeth Seneddol y Cynulliad yn bresennol**  
**Assembly Parliamentary Service officials in attendance**

Sarah Beasley	Clerc Clerk
Lewis McNaughton	Dirprwy Glerc Deputy Clerk
Ben Stokes	Gwasanaeth Ymchwil yr Aelodau Members Research Service
Adam Turbeville	Ymgynghorydd Cyfreithiol i'r Pwyllgor Legal Adviser to the Committee

*Dechreuodd y cyfarfod am 9.15 a.m.*  
*The meeting began at 9.15 a.m.*

**Cyflwyniad, Ymddiheuriadau a Dirprwyon**  
**Introduction, Apologies and Substitutions**

[1] **Huw Lewis:** Good morning, everybody. Welcome to our fifth meeting to consider the proposed domestic fire safety legislative competence Order. Before I welcome our witnesses, I remind members of the public in the gallery that the committee operates bilingually. Headsets are available for translation or, as an induction loop, to allow you to

hear the proceedings more clearly. Channel 0 on your headsets provides a verbatim broadcast, and channel 1 carries a translation from Welsh to English.

[2] If there is a fire alarm, the ushers will escort us from the room, so please follow their instructions.

[3] I remind everyone that all mobile telecommunication devices, such as phones and pagers, must be switched off and not set on mute, because they interfere with the broadcast and translation systems.

[4] On a point of housekeeping, there is no need, tempting as it is, to push any buttons on the microphones, as they automatically switch on when you are speaking.

9.16 a.m.

**Gorchymyn Cynulliad Cenedlaethol Cymru (Cymhwysedd Deddfwriaethol)  
(Rhif 7) 2008**

**National Assembly for Wales (Legislative Competence) (No. 7) Order 2008**

[5] **Huw Lewis:** I welcome the first panel of witnesses this morning. We are joined by David Hedges and Richard Mann from Community Housing Cymru. Would you like to spend a brief minute introducing yourselves to the committee members?

[6] **Mr Hedges:** I am David Hedges, and I was until recently assistant chief executive of Community Housing Cymru. I am now a freelance consultant and housing policy adviser to Community Housing Cymru.

[7] **Mr Mann:** I am Richard Mann, and I am a board member of Community Housing Cymru. I am also the director of development for United Welsh Housing Association, and I am a chartered surveyor.

[8] **Huw Lewis:** Thank you, both, for your attendance here this morning. It is very useful to our work.

[9] We move on to a series of questions that the committee has prepared in the hope that they will help to clarify matters and the views of CHC. The first one is from me.

[10] You say in your evidence that you remain to be convinced that the introduction of residential sprinkler systems in all new homes is the most effective way of reducing death and injury from fires. Can you outline your reasons for that? Also, can you set out what you think might be a better way of reducing fire-related death and injury in the home, in light of your comments for a more targeted approach at the most vulnerable in society and those living in older properties?

[11] **Mr Hedges:** In a nutshell, our evidence is saying that, if the purpose of the LCO is to reduce deaths in the home caused by fire, the important thing for the committee to do is to look at the evidence on causes of deaths in the home more generally—it is one of the issues that we have raised in our evidence—and to look at the risks in the kinds of housing that we have in Wales and at where particular types of property and types of clients would be seen to be at the greatest risk of injury and death through fire. Our approach would be to suggest that there may be better ways of targeting resources, time and energy in putting something in place that would be enforceable through the building regulations. It could also look at where risks are greatest, such as houses in multiple occupation—which, I think, are accepted as being one of the greatest areas of concern—possibly nursing homes, sheltered housing

schemes and other such projects.

[12] **Mr Mann:** As David pointed out, for us it is a wider brief in making sure that we direct what resources we have to areas of the home where, effectively, the risk of injury or death is more prevalent. An example of that at the moment is that the social housing sector works to a standard called design quality requirements, which incorporates lifetime homes. So, when we are looking at movement around homes, preventing trip hazards, the design of staircases, and so on, you look at the current state of the private sector, particularly with the increase in the amount of three-storey accommodation involving kite-winder stairs—from my point of view, they are a significant risk hazard in a property. Any legislation or resources that we have would be better if they addressed those issues rather than emphasising areas that are more de minimis.

9.20 a.m.

[13] **Huw Lewis:** Would Members like to follow up on that?

[14] **Janet Ryder:** For clarification, are you talking about reducing deaths by fire, or are you talking about reducing risk in general in the home? This LCO is specifically aimed at reducing death by fire in the home.

[15] **Mr Mann:** We are talking about looking at all the risks in a home—

[16] **Janet Ryder:** So, you are not just talking about fire risks.

[17] **Mr Mann:** We are talking about generic risk. One of the points that we would make is that we recognise that there is a risk of death by fire in properties, but a lot of the evidence looks at the amount of resources, physical or financial, that go into addressing that. We are suggesting that perhaps we are focusing too much on a single element, and we should look at the wider agenda.

[18] **Janet Ryder:** I think that we would all agree, Chair, that we need to address risks in the home, and if they can be addressed through building regulations—control of which the Assembly definitely needs—that would be a good move.

[19] However, we are attempting to look at one specific aspect of safety in the home. Are you saying that we should not be pursuing this LCO to reduce risk by fire? Are you saying that it will not significantly reduce the number of deaths in the home through fire? If you are saying that, what else can we do that would reduce the risk of death by fire?

[20] **Mr Hedges:** We are not persuaded by the evidence that is out there. If we start a programme of installing sprinkler systems in all new homes, at the rate at which we are replacing our existing housing stock—I may have messed up on the statistics here—we are replacing 1 per cent of our existing housing every year, so does that mean that it will take us a minimum of 100 years to replace all of our stock? I would guess that it would take much longer than that. So, the process of introducing sprinkler systems into new homes will take a long time to reach the point where the entire housing stock has sprinklers.

[21] **Huw Lewis:** Yes, the committee is well aware of that. The LCO, as proposed, is narrow in its scope, but there are reasons for that. Sandy, you wanted to make a point.

[22] **Sandy Mewies:** From reading your paper, you have dealt very heavily with building regulations, saying that perhaps this is something that could be dealt with through building regulations. However, how would you legislate against people tripping over in the home, for example? You have brought all these extraneous details into your paper, and I think that Janet

is right in trying to focus on the scope of the LCO as proposed. Are you saying that you do not think that we should proceed with this Order? Have you had any discussions with fire authorities? You must be aware that, in Wales, people die in domestic fires—not in residential homes, not in houses of multiple occupation, not in the kind of settings that you are talking about, but actually in their own homes. You are saying, ‘Look at all these other things,’ when the evidence that we have had clearly indicates that deaths are not happening in those settings, and that deaths could be prevented by fire sprinkler systems.

[23] **Mr Hedges:** I do not want to argue about fact, but I think that you will find that a significant number of deaths occur in houses of multiple occupation. You have already had some evidence that would suggest that that is a real problem.

[24] **Janet Ryder:** I would certainly welcome widening the LCO to include other areas, so if you want to argue along those lines, I would be interested to hear that evidence.

[25] **Sandy Mewies:** It is your focus that I am not clear on. For the reasons that the Chair has mentioned, this LCO is narrowly focused—there are good, significant reasons for that. Therefore, are you saying that you would not want to see this introduced in isolation and that you would prefer to wait?

[26] **Mr Hedges:** No, we are not saying that. We are saying that we should look at the priorities and identify what kills people in the home. You can then consider how you devote time, energy, resources and legislation to reducing or eliminating those factors. I would not have put death by fire at the top of my list.

[27] **Sandy Mewies:** I see that, in your evidence, you talk about fuel poverty. There is a time limit on that. I presume that you are saying that fuel poverty is of more concern and that we should forget this, but we are focusing, on a wider plane, on fuel poverty. I just do not understand; you seem to be objecting to this Order, when we have had evidence that, narrow as it is, this Order will prevent a significant number of deaths in domestic settings. Janet is absolutely right; this Order, eventually, one would hope, will be expanded to cover other settings, but there is a good reason for bringing it in as it is.

[28] **Mr Mann:** One of the questions for me, on the information that is provided, is that, with relation to deaths within a domestic setting—

[29] **Janet Ryder:** Can we just narrow this down? We all appreciate that there are many deaths in domestic settings, whether they are houses in multiple occupation or whatever, and, unfortunately, there are many causes of those deaths. We are attempting to narrow the field and attack one particular element of it. We are particularly concentrating on the element of deaths caused by fire in domestic homes. Therefore, can you please concentrate your answers on deaths caused by fire? We would love to address all of those issues but we are specifically looking at deaths caused by fire.

[30] **Mr Mann:** From the information provided on deaths by fire in domestic settings, I could not see how old the properties in which these accidents occur are. When you look at the current building regulations and their consideration of means of escape for persons contained within, you will see that a range of different measures already exist within the building regulations. Therefore, you have the introduction of hard-wired smoke detectors, and you are looking at the compartmentalisation of areas, which gives people more time. One of the elements of the information that we responded to is that smoke detectors will alert someone to a fire earlier than a sprinkler system will; they tend to trigger earlier. It is a matter of how long it takes for that person to exit the building. One of the elements of the evidence is about protecting the property. David and I discussed this before we came in. I am not sure that it is our view that one of the primary issues is about retaining the property. As a sector, we insure

our properties. In my experience of over 15 years of working for the social housing sector, I cannot recount that we have had a fire in one of our properties that has completely ruined it to the point where we have needed to rebuild it.

[31] The issues for us, as the social housing sector, around introducing sprinklers are probably wider than the physical, capital costs. We would need to consider a form of maintenance for them. I have taken some time to look at the Dŵr Cymru Welsh Water evidence and it seems that you are looking at an annualised programme of maintenance due to the stagnation of water in the holding units, and at making improvements to the infrastructure to provide the sprinkler systems. On the technical elements, there is an argument for targeting vulnerable people, particularly for a new-build care home or house in multiple occupation, but there is no consideration of the backlog of stock. That comes back to the question that I am asking, in many respects. We talk about deaths in existing buildings through fire, but how old are those properties? Did those properties incorporate the approved document standards that are being incorporated into the building regulations, and can you segregate between what is in the older stock and what is in the current stock?

[32] **Janet Ryder:** So would you support retrospective fitting?

9.30 a.m.

[33] **Mr Mann:** I think that the question of whether to retrospectively fit sprinkler systems comes back to whether that is prudent targeting of resources. There are a range of other things that need to be put into our existing stock. We know that the Assembly is promoting the Welsh housing quality standard and we know about the implications of promoting that for existing council stock. The Welsh housing quality standard is a standard for all housing in Wales, and yet the private sector, which owns the largest proportion of housing in Wales, is not seeking to achieve that standard. It is going to be incredibly difficult to introduce it into the existing stock. This comes back to David's point about the life cycle of the stock and how long it takes before you can introduce it.

[34] The other issue—and I am sure that Dŵr Cymru Welsh Water will come on to this later on—is that it is not just about the technical aspect of installing the technology in dwellings; it is about the infrastructure behind that. I have looked at Dŵr Cymru Welsh Water's evidence, and the infrastructure is not there to support that at the moment. So, if you are looking at making an impact sooner, perhaps you need to look in other areas.

[35] **Peter Black:** It is a matter of context. I think that I know where you are coming from: you are saying that there is a range of issues around the safety of the existing stock and you feel that this particular measure may not be as high a priority as other measures that need to be implemented for that stock. I am not disagreeing with that, because I think that it is quite clear where the risks are and where the higher number of fire deaths are, and I am clear that there are dangers around HMOs. Given that the Assembly and you, as social housing landlords, in particular, have a whole range of measures that are already in place or are being put in place to deal with those other risks, such as those in relation to hard-wired smoke alarms, the Welsh housing quality standard and a whole range of other measures that are coming to the fore, do you not feel that it is acceptable that we should pursue a measure that is in addition to that for new builds, so that we can at least future-proof new-build houses and protect their occupants against fire?

[36] **Mr Hedges:** I think that there is a lot of sense in that. You asked earlier whether we object in principle to what this is about; we do not. On the technical issues that Richard has raised, I still remain to be persuaded about whether having a sprinkler system is like having a fireman in the house 24/7, as was suggested in other evidence. I am not sure that the evidence would suggest that that is the case. The work that the Building Research Establishment has

done suggests that there is still a capacity for people to be overcome by smoke and to die before sprinklers are activated. I am not someone who is easily persuaded by a limited amount of evidence. I understand the message that there have been no deaths in homes that have had sprinklers fitted in them, but I have not seen any data on how many homes we are talking about—it could be a very small number. I remain to be persuaded that it is the answer to the problem.

[37] **Peter Black:** If we accept that this may be just one additional measure that we could introduce as part of a whole raft of measures, do you think that the LCO that we have in front of us is wide enough to cover the number of properties in which we should be fitting sprinklers, or do you think that we should just look elsewhere, at other measures?

[38] **Mr Hedges:** Our evidence suggests that you could look at the introduction of hard-wired smoke detectors throughout all properties, for example.

[39] **Peter Black:** I would not disagree with that.

[40] **Mr Hedges:** I believe that it is 25 per cent of homes that do not have any kind of smoke detector fitted in them. I do not know what proportion of the detectors that are fitted are battery powered, but we know that there have been failures with those. Our view would be that other measures could be taken.

[41] Our evidence also highlights that there have been, as I understand it, projects to install sprinklers in HMOs, for example, across Wales and there have been examples of pilot schemes using sprinklers in social housing, but I am not clear as to whether there has been an evaluation of how effective those various initiatives have been. We should not rush into what would be a hugely significant investment and policy direction. It needs to be based on sound evidence and the pilot schemes that have been undertaken.

[42] **Janet Ryder:** You say that you do not think that those pilot schemes have been evaluated yet, in your evidence, you specifically refer to those pilot schemes. You say that the scheme proved to be enormously complicated and that negotiations with the water authority on meeting its requirements became prolonged. Have those schemes been evaluated or not?

[43] **Mr Hedges:** I do not believe they have.

[44] **Janet Ryder:** So what have you based those statements on?

[45] **Huw Lewis:** We will get on to the pilot schemes a little later in our questioning. Perhaps we could let that lie for now.

[46] You mentioned your enthusiasm for hard-wired smoke detectors, which we would all share. We have had suggestions from fire and rescue services that the benefit of hard-wired smoke detectors and fire-prevention education has, in some senses, reached a plateau and that it has been done as well as it can be in reducing the number of fire-related deaths. They are very strong in their contention that legislation is needed as a further driver. I would welcome your comments on that.

[47] A very strong message that we have been getting from supporters of this idea is that it introduces a ratchet effect on attitudes to safety standards, which is similar, in many ways, to the way in which airbags in cars changed perceptions about what was expected from manufacturers—and, in this case, it would be housebuilders—as for what constitutes a basic safety kit. So, although it would be unrealistic to look at retrofitting airbags into older cars, ratcheting up expectations about what should be fitted in new cars—or new houses in this case—has a positive effect over time and changes perceptions. How do you feel about that?



[48] **Mr Mann:** There is still the question of the ability of the older stock. You mention that you would not want to go back and retrospectively fit airbags into an older car, and clearly, it would not make sense to do that; it would not be cost-effective. The lifespan of a car is clearly a lot shorter than that of our housing stock. We have housing stock in Wales that is 150 years old, and the expectation, if it is still being remortgaged, is that it will be there for another 25 or 50 years. Those properties were not designed to the standard that adhered to under the current building regulations. One of the points that David makes is whether the evidence—and we have yet to see a breakdown of the evidence about fires in homes that were built within the last five to six years—shows that we have ‘airbags’ in our homes already, in the form of the current design practice that is promoted by the building regulations. That is the question. We are talking about sprinkler systems in isolation as being airbags, but there is an argument that the ‘airbags’ are already there: we look at using materials that would lead to limited fire spread, we use windows as a means of escape—and there are design aspects that could be improved through looking at how people escape from homes—hard-wired smoke detectors are now a building regulations requirement, and so on. So these things are already being introduced. As David mentioned, it is difficult to see, in the evidence that is here, whether new homes, as they are being constructed at present, are the issue, or whether it is the existing older stock that is the problem.

[49] **Huw Lewis:** Okay. I am keen to move on because there is a limited time for each panel of witnesses.

[50] **Sandy Mewies:** You talked about building regulations and you obviously envisage major changes in building regulations to cope with all the issues that you feel should be covered, although, as the Chair said, it is certainly the case that many of these things are already being worked towards or indeed have been achieved. Therefore, what do you think building regulations could achieve that would not be achieved by this Order, bearing in mind that we are talking here about new domestic premises, whether that is new build or by conversion? You consider the Scottish Parliament experience in your evidence and you express some concern that it would take time for powers for building regulations to be transferred. If these powers could be acquired more quickly through this LCO, do you consider that that would be as effective an outcome as if this were done through building regulations? I am talking about a very specific and narrow definition.

9.40 a.m.

[51] **Mr Hedges:** Time is a difficult one. I do not know if the committee knows what kind of time it would take from now if the Order was approved and Measures were brought forward and a direction was given that, from a particular date, all new homes would have to have sprinkler systems installed. I can imagine that that would take a significant amount of time, so I do not understand why bringing this Measure through the Order would necessarily be quicker than doing it through a transfer of the building regulations.

[52] There is also a related issue about enforcement, which Richard and I talked about earlier, the question being: why would it be better to have this through building regulations? I think that it is about clarity of enforcement; in the past, we have sought to improve standards in housing. You can do so much by attempts at persuasion, but, ultimately it comes down to building something into legislation that is enforceable and forcing all developers to build to those standards. It is probably the same argument as you have heard from fire officers and others coming.

[53] **Sandy Mewies:** You say in your evidence that

[54] ‘the introduction of sprinkler systems would be best considered as part of a regular

process of review and consultation through a body focused on broad issues of construction, maintenance and refurbishment’.

[55] What type of body would you envisage being in charge?

[56] **Mr Hedges:** Again, that is about the building regulations, which we see as the focus of all the consideration of the changes that we want to make. There will be changes that we will want to make as industry representatives from the sector, and there will be changes that Government will want to bring in through regulation. Importantly, there will also be the changes that consumers expect to see in houses, because their aspirations are increasingly putting pressure on the industry and regulators. It seems that the best focus for consideration of those issues is through the organisation of the building regulations in the review.

[57] **Mr Mann:** One of the things that you will also need to consider is that if you introduce a requirement to install sprinkler systems in houses, it is not just a case of providing legislation around the installation and the introduction of the sprinkler systems. You will also need to consider some form of legislation on servicing the systems, because, for example, a gas fire under the gas regulations requires an annual service, as would a sprinkler system. There needs to be a regulatory framework behind that to ensure that we have enough competent engineers to undertake the servicing of these systems, particularly if you are looking at a cold water storage system where you are likely to have stagnant water sitting around for a period of time. That is going to need regular servicing.

[58] **Sandy Mewies:** We have explored that issue with others, and the general thrust from people is that maintenance will have to happen, but that sprinklers are quite low maintenance and that they rarely fail. You say that you have seen no evidence, but the evidence that has been put before us about the effectiveness of sprinklers has come from America and Canada, where they have been installed for a considerable time. I do not know if you are aware of that evidence.

[59] **Mr Mann:** I am not aware of it; I am just conscious of the fact that it is something that is likely to require some framework behind it to ensure that the sprinklers are serviced annually.

[60] **Sandy Mewies:** These are laws, and we are talking about legislation here. Any law is only enforceable because it is a law, and there will always be people who duck it, and that might be the case.

[61] **Mr Mann:** The point that I am making is that this would be legislation for the introduction of the sprinkler systems, but I have not seen proposed legislation on the servicing of the systems—perhaps that is encapsulated within this.

[62] **Sandy Mewies:** There is a narrow focus to this legislation, but the framework can be built in. We have heard evidence from Canada and America about the additional benefits afforded by sprinkler systems, which include cost savings because you do not have to rebuild fire-damaged properties in full—just the rooms affected by the fire because it tends to concentrate—and you do not have to relocate tenants for such long periods while repair work is carried out. You have already made your views known on this, but perhaps you would like to expand on them further.

[63] **Mr Hedges:** Richard, with his 15 years’ experience, has not encountered significant problems with fire damage and restoration. However, I understand the point that is being made. I am interested that nobody has really pointed very much to the Building Research Establishment and the work that it has done. One of the difficulties in all of this, and we are as guilty of it as anyone else, is that we are all self-interested. It seems to me that you will get a

real benefit from having evidence from an organisation that is—

[64] **Sandy Mewies:** We will be taking evidence from the BRE next week. I think that we are more concerned about what you do know, rather than what you think might happen.

[65] **Mark Isherwood:** I will just briefly refer to the BRE. It is my understanding that it has phrased its work using the terminology of costs and benefits, which can be misconstrued as being focused purely on financial cost as opposed to risk management. Is it your understanding that it actually relates more to measures of risk? I am conscious that social-housing providers, for many years now, have had to incorporate rigorous risk mapping and risk management into all of their activities.

[66] **Mr Hedges:** You can put these questions to the BRE about the scope of its work. In our approach to giving you evidence, we certainly wanted to weigh up risk more generally. Cost is a factor that we have commented on, but we do not see it as the key issue here. I think that social landlords have a good track record of dealing with the issue. Some might argue that some social landlords have had to be pushed into the work that they have done on the installation of smoke detectors and so on, but I think that it is clear that some social landlords were already doing that kind of thing. Ultimately, the Assembly felt that it was important to push all of them into doing it. We are certainly taking the issue of risk seriously.

[67] **Janet Ryder:** Going back to the pilots studies, have they been evaluated?

[68] **Mr Hedges:** The comments in the evidence are really memories of discussions that took place at the time that the pilots were under way. We have regular meetings of our technical services forum, which Richard chairs, and, at the time, people were very interested in the fact that a pilot was going on in a scheme in Aberavon involving one of our members. At the time, we received regular reports about the prolonged negotiations and discussions that were taking place and how difficult it was. However, I have never actually seen any kind of objective analysis and evaluation of how effective the project was. Also, perhaps I have not made it clear in the evidence that we have given, but I am not aware of any evaluation of the schemes to install sprinklers in houses in multiple occupation and whether they have been seen to be effective.

[69] **Janet Ryder:** I understand that difficulties in negotiations occurred, particularly with regard to the supply of water to the properties and the water pressure. Therefore, the difficulties occurred with the water companies themselves. If it was being negotiated on a Wales-wide basis, could you see any way in which those difficulties could be alleviated?

[70] **Mr Hedges:** I guess that technical issues are solvable, are they not? All of these things can be solved, ultimately, as long as the infrastructure is available and appropriate and somebody is prepared to bear the cost of the installation and the servicing. I do not think that that is an issue.

[71] **Peter Black:** I am aware of that scheme because I was around when it was being built and had discussions with Tai Dewi Sant. I think that we are talking about six or seven years ago when that scheme was put together. My recollection is that it was largely water pressure that was causing the problems. Obviously, because it was the first time that such a scheme had been done on that sort of scale, there were costs that might not necessarily be incurred nowadays—if you were to do it on a larger scale, or even because of the changes in technology and so on.

9.50 a.m.

[72] The evidence that we have heard says that, where you have water pressure problems,

there are other alternatives. The Tai Dewi Sant scheme had its problems, but, first, there have not been any fires as far as I am aware, so it is very difficult to evaluate the sprinklers' effectiveness; secondly, it was targeted at the elderly, a particularly vulnerable group; and thirdly, there are alternatives. Do you therefore accept that this scheme is not typical of what could be available around the rest of Wales?

[73] **Mr Hedges:** Again, without having the chance to see an evaluation, it is difficult to draw conclusions. If there are issues about water pressure, you will have plenty of evidence from others about the extent to which they are overcome. I think that Richard's point was that there is a broader infrastructure issue anyway.

[74] **Mr Mann:** There are various ways of introducing sprinkler systems to a domestic environment. Some work on the basis of residual water pressure, and some on the basis of cold-water storage within the dwelling, which can work on a lower pressure—just like a header tank in the house. Different ways of dealing with it bring different longer-term—I do not want to use the word problems, but it is the only one that comes to mind at the moment. If you are looking at cold-water storage systems, you are certainly, as I mentioned before, looking at introducing regular and, for the cold water storage systems, more expensive maintenance cycles, to be honest. As David said, technically, you can do anything, but is about whether it is reasonable or whether the investment that you are making can be directed in a different and more effective way that gives you the same result. I am not convinced that introducing current sprinkler systems into new build will provide the benefits that you expect them to, particularly because I have not yet seen anything that breaks down the evidence on deaths due to fire, but my suspicion is that they are predominantly in older properties and that they are also in houses in multiple occupation. So, in the evidence that you are collecting, I would like to think that we will be able to analyse that information and see where these changes are likely to provide a benefit.

[75] I know that you do not want to talk about the wider environment, but if we are looking at investing this money, it is not about whether we want to invest in improving our stock as a sector, but about ensuring that the investment we make has the biggest impact.

[76] **Huw Lewis:** I think that things are coming to a natural conclusion, but is there any point that you feel that you have not been able to make this morning that you would like to make—something that has not been drawn out in questions, perhaps?

[77] **Mr Mann:** I think that I have covered everything that I highlighted in my notes that I wanted to raise.

[78] **Huw Lewis:** As you are content, I thank you very much for your attendance this morning; it is much appreciated and it is a valuable addition to our work.

[79] We are joined now by Mr Keith Pratley, from Dŵr Cymru Welsh Water. Welcome to you, and thank you for taking the trouble to be with us this morning. Would you like to introduce yourself to the committee by describing your role in Dŵr Cymru Welsh Water and providing a little background?

[80] **Mr Pratley:** Thank you for inviting me. I work in the water investment section of Dŵr Cymru Welsh Water. I have two jobs: I am water efficiency manager, which means that I encourage the people of Wales to use less water where possible, and I am also water regulations manager, a job with responsibility for making sure that all the pipes and fittings in premises, domestic and industrial, are fitted in accordance with the Water Supply (Water Fittings) Regulations 1999, which is vital to ensuring that, primarily, there is not contamination of the public water supply, and covers waste, misuse, undue consumption and contamination of water. As you see from my submission, I have been 38 years in the water

industry, I have a degree in civil engineering, and I like to think that I am an expert on hydraulics and pipe flow. I have a great knowledge of water law and the regulations that we work by. It is opportune to say that you have to be aware that most of the decisions that we make are statute decisions, which means that we have limited discretion in most of the things that we do.

[81] If you got to know me, you would find that I am quite a modest person by nature, but it is not unreasonable to say that I am one of perhaps two experts—some might say ‘the’ expert—in the UK on water sprinklers in the water industry. I got involved with water sprinklers in 2001, when BS DD251:2000 was produced. The water industry was asked to comment on it and we all assembled in London to consider it. It immediately became obvious from concerns raised by installers that it was not understood how we operated, and certainly, we did not understand sprinklers, so both parties had a lot to learn. So, I got heavily involved with it. I am a convert; I can see that water sprinklers would be excellent in saving lives. However, there are a number of challenges to be overcome. Technically, there is no problem; the challenge is keeping the cost down.

[82] **Huw Lewis:** We will explore these issues in the questions.

[83] **Mr Pratley:** I must add one final thing: my remarks are primarily my own views from a national point of view, rather than Dŵr Cymru Welsh Water’s views. I have discussed the matter of pipe sprinklers informally with colleagues, but all water companies are waiting for national guidance. I chair a group that is completing guidance documents to fill in grey areas in existing guidance documents. I will meet representatives of the Department for Communities and Local Government next week. I am a member of the Water UK delegation, so much of what I have to say is national opinion, and we are still assembling national policy. Once that is done, I will prepare a policy document for Dŵr Cymru Welsh Water based on that.

[84] **Huw Lewis:** I am sure that you can assist us with broadening and deepening our knowledge of the issues.

[85] **Mr Pratley:** Sorry for expanding on that, Chair, but it is important to realise why—

[86] **Huw Lewis:** No, that is all right. It is a rare treat to meet a modest man in the Assembly. *[Laughter.]*

[87] I have a general, but fundamental, question. In some ways you have touched on this, Mr Pratley. Do you support the general principle of this proposed Order to have fire sprinklers fitted in all new domestic properties in Wales? Supplementary to that, were that legislation passed, what would you see as being the key difficulties or concerns for Dŵr Cymru Welsh Water?

[88] **Mr Pratley:** The decision as to whether they should be installed in domestic properties in Wales is not one that the water industry should be involved in. I could speak from a personal point of view, but I do not think that the committee is interested in that. I personally agree to some extent with the sentiment, as I said before, but the cost may be found to be so high and the benefits so few that the money might be better spent saving lives elsewhere. However, do not quote me on that. Basically, the water industry is anxious to ensure that the specifier and the customer get what they expect, and that they know what they will get. There is a lack of knowledge about sprinklers, and people think that it is just like a light coming on when they flick a switch. It is not like that with water. Behind the tap, the water is delivered at varying pressures. In uncontrolled areas—and more than half of Wales is probably still uncontrolled—the pressure will frequently vary between 45m and 50m at a high point, and 15m or below at a low point. During a standard week, the extreme low point will

perhaps not be as low as that but, as soon as you get into a drought situation, when everyone puts their garden sprinklers on and the farmers take all the water for irrigation, pressures can drop to very low.

10.00 a.m.

[89] So, the biggest challenge for us is satisfying the customer. An awful lot of installers naturally want to encourage the customer to buy the product, and they will want to design around the average pressure that we supply. The problem with that is that the sprinkler will perhaps only work 90 per cent of the time in any 24-hour period—it might work for 22 hours a day, but there could be 2 hours when it does not work. One of the challenges for this committee is: what specification will you put in? As an engineer, I do not like to design anything that will fail—except, as a slight digression, though one that you can easily picture, I have been involved in flood schemes, and the flooding in Tewkesbury last year happened just as the design had anticipated. All flood schemes are designed to overtop, and for housing, they are designed to overtop once every 100 years. That is what happened in Tewkesbury: there was an exceptionally high flood, which was a more-than-one-in-100-years occurrence, and it overtopped the flood scheme. The public was not interested in the Environment Agency's explanation that it worked as it was designed to work; the public thought that it should not be allowed to overtop at all.

[90] **Huw Lewis:** I think that we all understand.

[91] **Mr Pratley:** So, there is an analogy with sprinklers. One of the things that have to be decided is the specification that you want: do you want a sprinkler system that will always work, or one that will only work part of the time?

[92] **Huw Lewis:** All my colleagues will know the difficulty of balancing public expectation with technical issues; we understand. I will briefly touch on the question of cost. You mention in your submission—and thank you for preparing it—that there are likely to be a large number of properties for which the cost of installing sprinkler systems could be significantly higher than the costs mentioned in paragraph 32 of the explanatory memorandum. You say that there are special properties out there that could be very expensive to install a sprinkler system in. Can you explain why you think that that would be the case? To what degree do you think that the cost would rise for those particular properties?

[93] **Mr Pratley:** Well, a percentage is given: it is expected to be between 1 and 2 per cent. However, you must appreciate that the cost of installing a sprinkler system will be more or less constant no matter what the value of the house. I was heavily involved with the test at Sandown Road, Port Talbot, and looking at the figures, the extra cost of the whole scheme was £4,271, from the information that I have. On the assumption that those bungalows were worth £120,000—I do not know whether that is reasonable or not—that amounts to 3.5 per cent, rather than 1 to 2 per cent. Of that, the extra water cost was £1,200 above the normal cost for standard domestic supply. About half of that was due to the fact that you are connecting to an existing main whose size meant that the only way of making a connection was to drain the main and cut in a tee. That is a major job, and we had to write to a number of customers to warn them. If you are connecting to an existing main that is of a larger size, then you would not have to cut in a tee and that cost would not be involved.

[94] **Huw Lewis:** Thank you for that. We will now move on to a series of questions from Janet Ryder.

[95] **Janet Ryder:** You have already touched on water pressure and the management of it. As you said, you cannot always guarantee a consistent water pressure to enable sprinklers to operate. Would you like to add anything to that, particularly with regard to any options that

might be available to remedy it, and any costs that might be associated with it?

[96] **Mr Pratley:** If you have high pressure—if the minimum pressure is higher than 34m—you do not need a pump and you can put in the cheapest system. If it goes lower than that, down to about 15m, you would need a pump. If it goes lower than that, a pump by itself would not work as you would not get the suction to the pump, so you would then have to put in storage. So, technically, all of these difficulties can be overcome; it just pushes the cost a little higher each time. That is the only problem.

[97] **Janet Ryder:** Although there are individual new builds in pockets and in infill, the majority of new builds are in the form of estates. Therefore, you would presumably remedy any of those problems on an estate basis, and that would, I assume, reduce the costs.

[98] **Mr Pratley:** Well, what I have not yet discussed is pressure management. We are required by Ofwat to reduce our operational costs so that we can charge our customers less for water; every water company is expected to do that. So, we are spending a lot of money to make us more efficient and that means reducing the pressure in the water mains. Ofwat expects us to supply 10m pressure at a property. Anything more than that means that we are working inefficiently. There are many places where it is not practical to lower that pressure. For example, in a hilly area, you need enough pressure in the main to push the water to the house at the top of the hill. So, the house at the bottom would have to have much higher pressure, depending on the height of the hill, so that the water gets up the hill. It would accept that that is reasonable.

[99] **Huw Lewis:** Could I just clarify something, as I am a sad old scientist myself? You are quoting pressures in metres; could you translate that, as we have previously received evidence that measured pressure in bar? Below what bar measurement would this cause a problem?

[100] **Mr Pratley:** I tend to talk in metres to lay people, because they can picture water rising 10m above them. To be exact, one bar is 9.8m, which in round terms is 10m.

[101] **Huw Lewis:** I think that the minimum pressure quoted to us by the fire and rescue services was 1.5 bar.

[102] **Mr Pratley:** The way that Ofwat works is that we are supposed to have 1 bar or 10m pressure at the point of supply at the house. It says that, instead of measuring it there, you can measure it at the nearest fire hydrant. Provided that that is 1.5 bar, 15m, then the pressure is deemed to be 1 bar at the house; that is where that comes in.

10.10 a.m.

[103] **Huw Lewis:** That helps us to picture the degree.

[104] **Mr Pratley:** Yes, that is important. So, on new housing, we are always seeking to work efficiently by putting in pressure. If a new housing site is built where it is practical to pressure manage, we will build that new housing site with pressure management where the pressure could be as low as 20m pressure. Where the ground is relatively flat, for example, the whole of the M4 corridor from Caldicot to Llanelli, the pressure is managed now. The pressure is around 2 bars or 20m pressure throughout that area. By doing that, we have reduced our leakage by 50 per cent throughout the system since 1995. However, it also has a great effect because it encourages people to use less water. When people turn the tap on, and it depends how long people are prepared to wait, but if the water comes out in a great flow, more will go into the bowl than if it were to come out at a slower rate.

[105] **Janet Ryder:** Many of my constituents do not get their water through the mains, but rely on natural water sources. Can you envisage any problems that might occur in those areas or do you know of any solutions to those problems?

[106] **Mr Pratley:** I referred to the private supply of water in my statement. They would probably have to have a storage tank, because they need a higher rate of flow for the sprinkler system. So, unless they have a good source of water and pipework to bring it to their property fast, which is unlikely, they will probably have to have a storage tank and a pump.

[107] A storage tank would be heavy—for a house, you need just under 1 cu m of water, which weighs 1 tonne. You would not want to put it in your loft, because it is too heavy, and it would not be much good, because you have to have 0.5 bar of pressure at the sprinkler head—if you put it in your loft, you would not have enough pressure in your sprinkler head for it to work.

[108] **Huw Lewis:** We will now move on to some questions from Peter Black.

[109] **Peter Black:** In your evidence, you raise your concern about liability in a scenario where a sprinkler may fail to work effectively due to changes in the water mains pressure occurring at peak demand times. Are you aware of any water company or body that has been found to be legally responsible for a fire death in a property with sprinklers?

[110] **Mr Pratley:** No, because we know of few sprinkler systems. That is one of the industry's great concerns. The industry insists that around 7,000 systems are installed in the UK every year. A trawl has been done more than once throughout the UK where the water industry has found that around 50 systems a year are being installed, so there are almost 7,000 systems being installed that we do not know where they are. When we trawled Port Talbot, the installer told us about another that was done and, when we went to look at it, we said that it would never work, because he did not tell us that he was going to attach a sprinkler system to it. He just put in a standard house connection, but we said that the pipe was nowhere near big enough. Every year, there are almost 7,000 systems apparently being installed in the UK and the water industry knows nothing about them.

[111] **Peter Black:** So, in terms of liability, where do you stand?

[112] **Mr Pratley:** Legally, we do not think that we have any liability in terms of the failure of sprinkler systems under the Water Act 2003. We work totally within that Act. Our biggest concern is not the legal side, but the fact that, if someone dies due to a sprinkler system not working because of insufficient pressure or because of the design or specification, we will be severely criticised for allowing a system to be installed that we knew would not work properly. Our greatest fear, across the whole of the water industry, is the press and the public. When we were privatised, we had bad press for a decade. We have had to do a lot of hard work to convince people that we are doing a good job. So, we have no fear of the courts, but we have a great fear of the press and the public—and politicians, possibly.

[113] **Peter Black:** In your submission you refer to the Water Industry Act 1991, which prevents the supply of water to sprinkler systems if, in doing so, it would put at risk the water undertaker's ability to meet its existing and probable future obligations to the supply of water.

[114] **Mr Pratley:** That is unlikely to occur, but it has been determined that supplying water to a sprinkler system in a house is a non-domestic supply, and the Water Act states that we must not give a non-domestic supply to anyone if it would prejudice existing commitments that we have already granted.

[115] **Peter Black:** If this legislation is passed and we then passed a Measure to implement



it, we could be talking about 9,000 new-build properties each year in Wales.

[116] **Mr Pratley:** In Wales, Welsh Water connects 10,000 new dwellings every year, but Severn Trent Water connects to the heart of Wales, not that there is a lot of building in the heart of Wales, and then there is the Wrexham—

[117] **Peter Black:** So, does that scale of connections pose any risk to water supply if they were all sprinklered?

[118] **Mr Pratley:** No, because even in a town, I would imagine that only one sprinkler system would be going off at any one time. So, we do not see that the quantity of water is a problem and, generally, the mains would be perfectly adequate. On new housing sites—very small cul-de-sacs, for example—where we have put in quite small mains, we would probably have to increase them a size. The main problem would be where you were connecting to existing mains. If a single house was being connected to an existing pipe that was on the small side, it would be very expensive to upsize that main; it would be cheaper for that household to install a tank and a pump. So, that would be a more expensive installation.

[119] **Peter Black:** We have talked about the various technical solutions and I am interested in the adequacy of the existing water mains supply. What frequency would you require to upgrade that water mains supply if all new properties were required to have sprinklers? Would you expect there to be a regular programme of upgrades to meet that demand for sprinklers or do you think that that could be accommodated by other technical means?

[120] **Mr Pratley:** Our system already has sufficient capacity to supply sprinklers everywhere, but if you wanted to avoid putting in a tank, there would be a few existing mains that are not adequate in size, and that would be a very expensive solution.

[121] **Peter Black:** Would you expect the developer to bear the cost of that?

[122] **Mr Pratley:** Yes.

[123] **Sandy Mewies:** You say that it seems likely that an annual charge would need to be levied on the customer for maintenance and management of the water company apparatus relating to the sprinkler. In broad terms, what additional apparatus would be required, over and above the existing infrastructure, and would you envisage all costs being transferred to your customer?

[124] **Mr Pratley:** To answer your last question, all costs involved have to be transferred to the customer, and the legislation requires that. With regard to the extra apparatus, as I envisage it, you would have a single pipe from the mains to the pavement; under the pavement, you currently have a meter chamber and stop tap, which takes the water into the house, and you would have a branch at that point into a second chamber, which would have a meter chamber with a stop valve, taking the sprinkler supply into the house. So there would have to be additional pipework and two chambers rather than one under the pavement. As fires are very infrequent and because we cannot charge anyway, we would get no income at all from the water used—we are not allowed to charge for fire water anyway. We would have the cost of maintaining that pipework under the pavement, and there would be a lot of joints that could potentially leak, so that would be another concern of ours.

10.20 a.m.

[125] We would have the extra cost of repairing leaks, repairing the chambers and any settlement of the chambers over the long term, the replacement of the meters, which only last

around 10 years, and the eventual replacement of the whole system when it wears out, which will probably be several times in the life of a house. So, I envisage that there would have to be an annual charge for that. Also, there would be the extra cost of reading the extra meter just to check that no water is being used illegally through that sprinkler system.

[126] **Janet Ryder:** Can you just clarify that your assumption is that these systems will wear out and need repairing or replacing? No-one has said that to us before.

[127] **Mr Pratley:** I suppose that the only part that will certainly need to be replaced is the meter. The pipes in the ground would be expected to last 70 years, I suppose, but there could be some leakage—

[128] **Janet Ryder:** Are you referring to the system in the house?

[129] **Mr Pratley:** No; I am talking about our pipes under the pavement.

[130] **Sandy Mewies:** You said that it is extremely important that pump and sprinkler systems are regularly maintained if they are to work properly, and that serious consideration needs to be given to how you ensure that this maintenance is carried out regularly by householders, who are often disinterested. Can you outline how you think that that could be achieved, and any particular concerns that you have about it?

[131] **Mr Pratley:** I altered the word ‘disinterested’ and put it slightly more carefully. I am sorry; what was your question?

[132] **Sandy Mewies:** How do you think that you can get disinterested householders to undertake maintenance and do you have any particular concerns in relation to it?

[133] **Mr Pratley:** That is not something that we would get involved with. The maintenance of the system would not be our responsibility.

[134] **Sandy Mewies:** Do you envisage problems in that there may not be enough bona fide people to do it?

[135] **Mr Pratley:** I am sure that people could be trained to do it. I do not see that as a hindrance. It is a piece of equipment that we would not be involved with. It is no different to someone connecting a washing machine to the end of our pipework—we would not check that people maintain their washing machines or whether the machines wash their clothes properly. I just pointed out that maintenance is vital; it is not a case of fit and forget. If you install a pump system, it should ideally be turned over once a month, otherwise it sticks. So, electronics would hopefully be fitted so that it would automatically turn over every month. The British standard is quite clear that there must be annual maintenance of the system.

[136] **Sandy Mewies:** That is BS 9251:2005, which we have already discussed, is it not?

[137] **Mr Pratley:** Yes.

[138] **Sandy Mewies:** That is the British standard, is it not?

[139] **Mr Pratley:** Yes.

[140] **Sandy Mewies:** Therefore, I assume that that is being discussed and focused on in this.

[141] **Mr Pratley:** Section 7.7 is all about maintenance. Section 7.2 states that the sprinkler

system should be subject to an annual inspection test by a suitably qualified and experienced sprinkler contractor. Getting the customer to do that is my concern on the adequacy of the system. Someone who has paid a lot of money to have it put in their house will have it maintained, but someone who—

[142] **Sandy Mewies:** I suppose that that could be the case. I compare this to burglar alarm systems, where the insurance industry would perhaps give you a discount. However, it has to be regularly maintained and there are other things that you have to do.

[143] **Mr Pratley:** That may be one way of doing it.

[144] **Huw Lewis:** Are Members content at this point? I see that you are.

[145] Is there anything that you would like to add briefly, Mr Pratley, that has not been drawn out perhaps through the questions, that you think might be valuable to us?

[146] **Mr Pratley:** Yes, I will make a quick point on costs. You are probably aware that, from 1 April, street work licences are required, so that would be an additional charge—cash charges. I can only emphasise, although I think that I have covered it, that performance specification is the key. Do you want a system that, if it were put in today, with today's pressure and flow situation, would work 100 per cent of the time throughout the year, or would you accept a system that would work only 90 per cent of the time? Related to that, we are gradually moving around Wales putting in more and more pressure management measures. You could put a system in that works perfectly to your parameters today, but if we put in a pressure management system next year, it will not work. The specification needs to include whether you want it designed for what we envisage will happen in the next five or 10 years, as well as today's pressure conditions. We can make a judgment as to some areas where it cannot happen. If you decide that you will not worry about the future, you then have to take into account the reaction of the occupier in five years' time, who will be told by us, 'We have reduced the pressure, and you will now have to spend some money on putting in a pump and a tank'.

[147] **Huw Lewis:** Sure. The lesson is clear that dialogue with Dŵr Cymru would have to be maintained throughout the process. You have raised some important technical issues that would need to be considered if we were to get to the stage at which we implement legislation such as this, and we would need to take into account the evidence that you have given us today. I thank you for taking the trouble to be with us this morning.

[148] **Mr Pratley:** It has been a pleasure. I am always available on the phone if anyone wants to discuss any point; I would be pleased to do so.

[149] **Huw Lewis:** No doubt someone will take you up on that. Thank you for your trouble this morning and we wish you a safe journey home.

[150] **Mr Pratley:** Thank you very much indeed.

[151] **Huw Lewis:** Okay, we now move on to our next witness. I have asked our previous witnesses this morning to introduce themselves, but perhaps we could dispense with that in your case, Minister. Welcome to the committee.

[152] We want to explore your take on the proposed LCO on fire safety and sprinklers through a series of questions, and the first couple will come from me. You say in your submission that you support the general principles of the proposed Order. How do you think an Order like this, if successful, would contribute to the Assembly Government's commitment to tackling domestic and non-deliberate fires? What would be the scale of that

contribution, and are there any matters outside the scope of the proposed Order that you think should be provided for?

[153] **The Minister for Environment, Sustainability and Housing (Jane Davidson):** Thank you, Chair. I am very pleased to come to give evidence to this committee.

10.30 a.m.

[154] It is important to say at the outset that the Assembly Government supports the principle of the proposed Order, as outlined in our evidence to you. On how it contributes to broader Assembly Government policies, the Assembly Government has always been committed to reducing the number of deaths and injuries caused by domestic fires, and it recognises the good evidence from other countries that sprinklers have reduced the number of deaths. Previously, when I was Minister for education, that evidence led me to make it a requirement of the grant that sprinklers be installed during the major refurbishment of new schools. There is also a requirement on the Assembly Government in relation to sheltered accommodation, because vulnerable people would find it difficult to move quickly in the event of a fire in multioccupancy settings, and so that provision is already in place. In addition, when Edwina Hart was Minister responsible for fire safety, she put in an additional programme to focus on particular schools, and I think that 22 schools are now being fitted with sprinklers as a result.

[155] So, the Assembly Government has already demonstrated its commitment to tackling fire safety through sprinklers in a range of areas, which is why we strongly support the principle of the LCO. The bottom line is that any action that saves life, reduces injury, and contributes to economic and environmental benefit, rather than loss, is a good thing.

[156] You asked me whether there was anything outside the scope of the Order that we believe would be helpful to include, and the committee will know that we are actively pursuing the devolution of building regulations, which would provide the same opportunity as this LCO, but it would be more comprehensive, as part of a broader consideration of fire safety. The scope of the LCO is clearly a matter for the sponsoring Assembly Member, but if it were an Assembly Government sponsored Order, we would look for the widest possible powers to provide flexibility, and the Assembly could then look at narrowing it down in the future with a Measure, on the basis of the appropriate cost/benefit analysis.

[157] **Huw Lewis:** Thank you, Jane. As a supplementary to that, which touches again on the concept of the breadth of the application of the LCO, you have outlined some of the Assembly Government's fire safety initiatives—in sheltered housing and schools, and so on—and they are targeted at vulnerable groups, or groups that we prioritise, let us say. Do you think that this Order should take a universal approach, or should we consider targeting high-risk groups in some way?

[158] **Jane Davidson:** That is an interesting question. From the Assembly Government's perspective, in the context of the Order, we would prefer to see the broadest possible powers around fire safety devolved—ideally, those that are currently reflected in building regulations. We feel that it would then be for the Measure to look at specific targeting. The residential elements are outlined in the explanatory memorandum, but if the Order and subsequent Measures were targeted at new general housing, for example, the occupant would not be known at the time of construction, and so you could not target effectively in that context. If there was evidence to suggest that social housing was more at risk from domestic fires—and, at the moment, we do not have such evidence—we could introduce sprinklers as a condition of funding. So, there are other ways in which one could take that forward.

[159] I know that you will have already looked at the 2004 Building Research

Establishment report, which found that sprinklers were likely to be cost-effective in care and residential homes—and Scotland already requires such homes to have sprinklers. That is a high-risk category that Members may want to consider in the context of a Measure, but it is terribly important that the LCO is as broad as possible, and closely reflects the requirements in building regulations. If it does not, you will have a requirement under existing building regulations and an additional requirement based on the specific nature of the LCO. That is a very important point for the committee to consider.

[160] **Huw Lewis:** I think that you are right. Before I bring Sandy in, I think that Peter Black wants to say something.

[161] **Peter Black:** Earlier today, we had evidence from Community Housing Cymru, and its representatives were concerned about the priorities of this LCO. They felt that a number of risks in the built environment were not being addressed by this Order, and that it does not target those who are most vulnerable to fire-related deaths and other risks in the home, such as the elderly and the socially deprived, particularly because it relates to new build. There is some evidence to indicate that those groups have the highest proportion of fire-related injury and death. Do you concur with that view or do you feel that the Order is just one club, if you like, that you can use to tackle the range of risks that homeowners face?

[162] **Jane Davidson:** If the Order were created as widely as possible, there would be further opportunities to talk to Community Housing Cymru and others about its most efficacious use in the context of a future Measure. Having looked at the written evidence that Community Housing Cymru provided to you, it is important to note that there is not a sufficient evidence base in a number of areas. In looking at a future Measure, it would clearly be important to build on the evidence base, but also to look at where we want to acquire evidence from.

[163] **Sandy Mewies:** Jane, we know that the Assembly Government is committed to pursuing the transfer of building regulations and you have suggested that the aim of the proposed Order could be better dealt with by changes to building regulations. Could you expand a bit further on that and on what you think the advantage would be, although I think that you have more or less answered the question by saying that it would give a wider scope? Could you also tell us at what stage these discussions are with your counterparts at Westminster?

[164] **Jane Davidson:** Using building regulations would allow a comprehensive consideration of all the issues in the context of fire safety measures, and would allow us to take a consistent approach. From conversations with Ann Jones, the sponsor, I know that she would be happy for that to come in the context of devolved building regulations, so that we could then consider this for a future Measure. One of the most important elements is that which I have just mentioned to your Chair, namely that if outcome came about through building regulations, the use of sprinklers might lead to savings with regard to other passive measures, such as compartmentalisation, fire doors, and those sorts of things, which may not be required if this were done in the round. However, if this were done in addition to building regulations, all those aspects would still be required in the normal way, under the building regulations, and anything that the Measure put in place would be over and above that. Therefore, we would be in a situation where the compensatory savings might not apply, and that would add to the costs, and add some elements that might lead builders and other organisations to feel that some elements of the costs were therefore nugatory. So, that is a very important consideration, particularly in the context of public spending.

[165] **Sandy Mewies:** Where are you with the building regulations?

[166] **Jane Davidson:** We are in almost daily contact with Westminster at the moment, are

we not, Francois? The commitment in 'One Wales' was to devolve building regulations, and I am in regular dialogue with the Minister, Caroline Flint, over the timetable and our aspirations for 2011 in relation to zero-carbon building. Through the Sustainable Development Commission, we have established work looking at how to get us from where we are to the delivery of that commitment in 2011. That is feeding into the evidence that forms the basis of our discussions with our colleagues at Westminster. I think that my next phone call is tomorrow afternoon.

[167] **Sandy Mewies:** Are you saying that that is unlikely to happen before 2011?

10.40 a.m.

[168] **Jane Davidson:** No, not at all. Our ambition is for building regulations to be devolved during 2008. We wanted that timetable in the context of being able to ensure that our other aspirations could then be looked at in a deliberate way, prior to 2011.

[169] **Huw Lewis:** We will now have some questions from Peter Black.

[170] **Peter Black:** In your submission, you suggested that the committee should consider the draft definitions contained in the proposed Order, and particularly the term 'residential premises'. As you say, it is not clear what this encompasses. Given what you have just said about the widest possible scope being required for this LCO, do you feel that we would achieve that by not having any definitions in there at all, and leaving them for a Measure?

[171] **Jane Davidson:** You will have increasing evidence in terms of what 'residential' encompasses, as you have had in your evidence sessions this morning. From our perspective, the closer the LCO is to the requirements on fire safety in the building regulations, the wider the opportunity for the Assembly to have a targeted Measure in future that would be able to fulfil people's aspirations, which is why we are supporting the principle of the Order, but which would also be able to look at a strong evidence base. Do you want to add anything to that, Francois?

[172] **Mr Samuel:** No, I have nothing to add to that.

[173] **Peter Black:** How would we achieve that in terms of the particular definitions? Would we need to be more precise in our definitions or could we just dispense with the definitions altogether, and rely on the building regulations and a Measure to deal with that issue?

[174] **Jane Davidson:** Our view is that we should go for the broad competence now, and leave the definition to the Measure stage.

[175] **Peter Black:** That is helpful, thank you. You also said in your submission that there are a number of issues that will require consideration, including issues of water supply and pressure. Can you expand on that?

[176] **Jane Davidson:** I am clearly not a technician, and you had one of the best experts in front of you in the previous session. However, the principle—which is about concerns in some parts of Wales about water pressure, where water pressure is found to be insufficient and the use of pumped water storage is required—is that account would need to be taken of those costs. The fundamental principle that was included in the evidence from Dŵr Cymru is that the costs that are outlined in the explanatory memorandum may not be a true reflection of some of the costs for maintenance, ensuring that there can be appropriate retrofitting in existing refurbished houses, and addressing the capacity of existing water mains and so on. However, you will have a chance to look carefully at the evidence that you have been given

on those issues.

[177] **Huw Lewis:** Before I bring in Mark Isherwood, to clarify something for my own sake, can we nip back to the building regulations for a second? You mentioned that, in the best case scenario, we could see the devolution of building regulations this year. How long would it take, according to your best guess, for new Welsh building regulations to be formulated? Once we had the powers, how long would it take us to develop those powers into something new for Wales?

[178] **Jane Davidson:** It would be an iterative process. What would be important in the devolution of building regulations is that, considering that they are already complex, we would not want to make many changes in the early stages. We would want to achieve some specific outcomes. So, for example, we might choose to look only at outcomes related to our aspiration of having zero-carbon homes from 2011, in order to really bump up energy efficiency issues. I have recently announced that we have moved over to the code for sustainable homes at any rate, and have therefore put a level on the code for sustainable homes. In addition, for example, we might want to look at fire safety issues, but we would not want to change all aspects of the building regulations early on, because we would want to take our time and consider what the appropriate changes would be.

[179] **Huw Lewis:** It is a difficult question, and it may not be completely answerable, but if we were to take an early decision that fire safety would be a part of this straightaway, what kind of gestation period would we be talking about to change a regulation?

[180] **Mr Samuel:** It really depends on the issue that you are looking at.

[181] **Huw Lewis:** I know that it is a difficult question.

[182] **Mr Samuel:** With regard to part L of the building regulations, which covers energy efficiency, some of the reviews have taken three or more years. If it is a relatively simple measure, it may take around two years. It is a rigorous process in terms of regulatory impact assessments, public consultation and the development of proposals and the consideration of consultation responses.

[183] **Huw Lewis:** That is a fair answer to a difficult question. Could I probe you on that? Would fire safety be a WAG priority?

[184] **Jane Davidson:** Yes, fire safety would be a WAG priority.

[185] **Huw Lewis:** Thank you, Minister. That is a clear answer.

[186] **Mark Isherwood:** Your submission also refers to qualifying the costs and likely benefits of a measure that mainly affects new housing, which, I think, you said has an annual output in Wales of less than 1 per cent of existing stock. Noting that the proposed Order extends only to new build residential properties, could you expand on that a little for us?

[187] **Jane Davidson:** This is one of the areas where insufficient evidence is available. New housing is already built to much higher standards in terms of fire safety than many of the houses that exist in Wales. We also have some of the highest rates of home ownership in Wales, along with very high levels of sub-standard housing. The 2004 report by the Building Research Establishment, which was updated in 2006, was, at the time, the best analysis of costs and benefits in existence. I have no evidence to suggest that the conclusions that it reached at that time were unreasonable in any way. However, with regard to considering any subsequent measure, the latest information on costs and benefits would need to be taken into account. The report looked at the evidence base for risk issues. This goes back to an earlier

question of where Members may wish to target in the context of a Measure for the future, once the overall powers are transferred to the Assembly.

[188] **Mark Isherwood:** You referred to the BRE research in 2006, which found that residential sprinklers would be most cost-effective for dwellings such as blocks of flats, and residential care homes, but not cost-effective otherwise. Do you have any views on that, perhaps bearing in mind what the Scottish Executive has done?

[189] **Jane Davidson:** As I said, in the context of the Order, that is why it is important to keep the definition as broad as possible, so that appropriate work can be commissioned. As Francois said, if you are changing building regulations, you need to have regulatory impact assessments and the appropriate consultation, which will test a number of these issues. So, my view is that we must test the evidence. We must establish where the evidence demonstrates unequivocally that there is a benefit—as we have found in the context of schools or sheltered accommodation, and as the report previously found in the context of high-rise buildings, for example. We must be focused on where there is a clear benefit.

[190] **Huw Lewis:** Are you content, Mark?

[191] **Mark Isherwood:** Yes, thank you.

[192] **Huw Lewis:** Are Members content? I see you are. We are a happy committee.

[193] I would like to raise one more thing if you are willing, Minister. In the final paragraph of your letter to me of 25 April, you ask that you be allowed to submit further written evidence. We would welcome that, and it would be extremely useful to us. Would you be able to give some kind of timescale as to when you might be able to do that, because that further written evidence would be very helpful to the committee?

10.50 a.m.

[194] **Jane Davidson:** The issue here is that I could not, at this point, comment on the wording if it is not the final wording that will come from the committee. That was the point. In my last paragraph, we ask whether the intention is to affect only houses or to go wider. If the committee decided to go for the definition that is used in the context of building regulations—or to recommend that to the Member—I have already indicated that the Assembly Government would be happy with that. However, if the committee chose to change the wording and come up with something that was short of that, it would be important that we were then able, if necessary, to include any other input, and we would do that quickly.

[195] **Huw Lewis:** That would be positive from our perspective as well. Therefore, if Members are content, it just remains for me to thank you, Minister, for your time—I know that you are busy. Thanks for your input this morning, it has been very helpful.

[196] I declare the meeting closed.

*Daeth y cyfarfod i ben am 10.51 a.m.  
The meeting ended at 10.51 a.m.*