

HANSARD REPORT OF 2nd READING OF LORD HARRISON'S BUILDING REGULATIONS (AMENDMENT) BILL – 15 JANUARY 2010

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House of Lords

Friday, 15 January 2010.

10 am

Prayers—read by the Lord Bishop of Chichester.

Building Regulations (Amendment) Bill

[HL]

Second Reading

10.05 am

*Moved By **Lord Harrison***

That the Bill be read a second time.

Lord Harrison: My Lords, under its unassuming title, I have the honour to present this Bill to your Lordships today. The Bill's ambition is to save the lives of those who otherwise, for the want of parliamentary action, needlessly die or are maimed or injured in fires, principally through burns or smoke inhalation. This simple Bill will save lives, as well as property, save millions of pounds of public money and significantly improve our environment. By this sensible Bill, we have a chance today to make a real difference to people's lives. I hope that we can. Our modest proposal is to extend the Government's existing building regulations, whereby sprinklers must be fitted in new residential blocks more than 30 metres in height, to new residential blocks under 30 metres in height. If passed, the Bill would ensure that they, too, are fitted with sprinklers or other fire suppression systems to approved document B standard. New schools, residential care homes and large single-storey retail buildings under 30 metres will also be protected by sprinklers, which can throw a valuable lifeline to the elderly, the infirm, the schoolchild as well as the shopper unfamiliar with the shop fire exits. Last year, 347 of our fellow citizens missed out on those vital few minutes which would have provided the time to run for cover. A death in the family from fire is incalculable in terms of human misery. Nevertheless, the ODPM has suggested that each fatality from fire can cost the economy a staggering £1.4 million. The total cost to our economy was calculated in 2004 at £7 billion. Of that, £2.5 billion is identifiable as damage to property, the loss of viable businesses and the disruption to the nation's workforce. In passing, it should be noted that people increasingly work from home. This, in turn, increases their fire risk and cost to the economy. In layman's terms, this wasted £2.5 billion lost to needless fires would have bought 80 new secondary schools or provided 5,000 hospital beds. This cost is in addition to the fire service's preventive work and its familiar task of putting out fires and cleaning up the consequent damage. These days, our

intrepid firefighters in the modern fire and rescue service have to marry old-fashioned bravery with a new skill set as teachers, public speakers and proselytisers for best fire prevention practice. I should add that sprinklers help to save the environment, not only by reducing the 2 million tonnes of carbon dioxide spilt into the atmosphere as a result of putting out unbidden fires, but by eliminating wastefully expended energy as a consequence of having to rebuild or repair burnt buildings. Sprinklers can also conserve 96 per cent of the 5.6 billion litres of water used annually in the United Kingdom to fight large fires. The main groups of people who suffer disproportionately from fire incidents are: students; other 16 to 24 year-olds; the disabled; female single parents; other single, middle-aged people, a number of whom drink and smoke at home, thereby heightening their vulnerability; and the most significant group of all, the elderly, with the over-65s being very vulnerable and the over-80s in the greatest peril of all. Last year, deaths in domestic fires rose 5 per cent from 331 to 347, whereas deaths in other buildings fell by almost half. This strongly suggests that fire safety in domestic buildings has not advanced as speedily as had once been hoped. Moreover, the nation's changing and aging demographic requires homes to be more resistant and sustainable. Further, we must recognise, and I believe that the Government do recognise, that current procedures for evacuation in a fire are antiquated, especially now that more people live longer into old age with a commensurate and increasing lack of mobility. Less mobile people often retreat into a single room to live, which leaves them more vulnerable to dying in fires in the so-called room of origin. These deaths are on the increase and are a worrying development. In these circumstances, smoke alarms are a help, but sprinklers are better. They give a breathing space for the less mobile to make a timely exit. Moreover, sprinklers can extinguish fires by themselves, which is a real plus in saving lives and property. Sprinklers were introduced some 150 years ago, principally to save property. Nowadays, we recognise their pivotal role in saving lives. Where sprinklers have been installed, fire deaths have almost been eliminated, injuries have been reduced by 80 per cent, firefighter safety has been significantly improved and property damage has been reduced by an astounding 80 per cent. These findings are echoed by a 2007 study conducted by the US National Fire Protection Association. Interestingly, it found that where sprinklers are fitted, nine out of 10 fires are confined to the room of origin compared with six out of 10 fires where no sprinklers are fitted. This is important. Given that most people who die in fires succumb in five minutes, the operation of the sprinkler in the first three minutes is crucial. This is especially true given that the average call-out time of even our best fire and rescue services is some 10 minutes. Interestingly, in the UK, we have not, as yet, had multiple fire deaths in buildings with working sprinkler systems. Moreover, given the paramount danger from smoke inhalation, sprinklers beneficially wash the larger particles of smoke and so reduce the toxicity and density of acrid smoke, thereby saving lives. Sprinklers work, and we have the evidence from countries in the vanguard of sensible change. In Vancouver, the first mandatory sprinkler by-law was introduced in 1973. In those days, fire deaths were 703 *Building Regulations (Amendment) Bill* [15 JANUARY 2010] *Building Regulations (Amendment) Bill* 704 [LORD

HARRISON] 7 per cent per 100,000; by the 1990s, the death rate was sharply down to 0.6 per cent. In Scottsdale, Arizona, the sprinkler law was brought in in 1985. Losses attributable to fire were reduced by 90 per cent, which compared favourably to fire losses in unsprinklered buildings, many of which are residential. Nearer to home, in Studley Green in Wiltshire, a 1999 £10 million redevelopment of a housing estate included sprinkler protection in some 200 homes. Subsequently, two fire incidents have occurred. In one, two lives were probably saved by the sprinklers; in the other, considerable property damage was averted. On the Studley Green estate, nine out of 10 householders declared that they liked having sprinklers; three out of four worried less about a fire in their daily round; and only one in five residents worried about the sprinklers going off accidentally. Perhaps I should say a word about the 400 million sprinklers fitted each year worldwide, especially as some people think they are problematic. They are normally activated when the temperature in the room where the fire is burning reaches the preset temperature of the sprinkler head. That is normally 68 degrees centigrade, which is a very high threshold. They are activated as individual heat sensors. The water is released only in the room where a fire is detected. These facts explain why the chance of a sprinkler malfunction is remote; it is computed as one chance in 16 million operations. Like other technologies, sprinkler technology advances in leaps and bounds and other advances in technology help. For instance, the use of PVC pipes in new build overcomes the problems associated with leaks from traditional pipes. Some in the water industry are worried that the traditional lowering of water pressure at night might cause more leaks, but the installation is of new mains in new buildings. This allays the water industry's groundless fear. I believe this is particularly true of Dwr Cymru, the Welsh water authority. It has been reconciled, having been antagonistic. It is also useful to note that where sprinklers operate, firefighters use less water from their appliances. This has the environmental effect of not contaminating our nation's watercourses with dirty water, as happens with traditional methods of extinguishing fires. The main cost of sprinklers is the capital cost of installation, which is 1 to 2 per cent of the total capital cost of construction. Annual maintenance costs are small, up to £150 a year. The 2005 BRE report on the effectiveness of sprinklers in residential premises was commissioned by the ODPM. It found sprinklers to be most effective in residential care homes and tall blocks of flats. It generally supported the use of sprinklers. However, caution should be exercised about the report's conclusions. The Fire Sprinkler Association and the British Automatic Fire Sprinkler Association challenge some of its contents and findings, including the doubtful cost-benefit analysis. The 1984 Ruegg and Fuller data are precipitate, and so unreliable, given that the legislation was introduced only in 1981. The 2002 Rohr report is also faulty. It mistakenly suggests that fire deaths have occurred in the United States of America in sprinkler-protected buildings. That is simply wrong; they have not. In addition, the BRE report has entirely ignored all the data available from Arizona and Canada, to which I have already alluded. It is simply not good enough to rely on solely UK-based data. I hope my noble friend will look to Wiltshire and Wales for more up-to-date local data, and worldwide for

a more comprehensive view. I am sure he has been informed of the legislation similar to today's Bill that is now successfully passing through the Welsh Assembly. Today's Bill is simple and effective. Almost at the stroke of a pen, the building regulations applicable to sprinklers fitted in new buildings over 30 metres high can now operate for residential buildings of less than 30 metres. There are people alive today who will live out the full term of their lives and not perish in an avoidable fire to the great sorrow of their family and friends and the wider community. I hope that this legislative stroke of the pen is enacted, even in the dying embers of the successful mandate of this Government, who are soon to arise phoenix-like from the ashes in the spring of this year.

10.19 am

Lord Brookman: My Lords, I declare an interest as an officer of the All-Party Group on Fire Safety and Rescue. My noble friend's Bill is, to state the obvious, not lengthy or complicated, but, from my perspective and that of many others in this House and in organisations such as the British Automatic Fire Sprinkler Association, the European Fire Sprinkler Network, the National Fire Sprinkler Network, key insurance companies and the general public, it is very important and, if passed, will be a significant milestone in fire safety legislation. My noble friend is to be complimented, for the second day on the trot; he has had a busy week. The Bill is very well constructed and equally well researched, and his introduction of it spoke volumes for the case to amend the Buildings Regulations 2000 to require the installation of an automatic fire suppression system in new residential premises in England and Wales. The Government are receptive to the views of the organisations that I mentioned. Indeed, as my noble friend has said, there have been some important developments in England and Wales. New residential properties that are above the height mentioned by my noble friend must have sprinklers, as must large warehouses. Further new guidance on fire safety in residential care homes, including the use of sprinklers, has also been introduced, so progress has been and continues to be made. All this points in the right direction, so my noble friend's Bill is worthy of adoption and implementation. I have one concern. The view has been expressed to me on more than occasion that sprinklers do not save lives, they save buildings. That is refuted by experts in the field, and I am pleased that that is the case. I therefore hope that once again there will be a generally positive response from the Government to this worthwhile Bill. As the Association of British Insurers says in its recent brochure, *Tackling Fire: A Call for Action*, working with the Government and other stakeholders is vital to making progress, and the Bill is part of that process.

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10.22 am

Lord Whitty: My Lords, I too support the Bill, and I congratulate my noble friend Lord Harrison on bringing it forward and on his expedition of all the points. As my noble friend Lord Brookman has just said, it has the support not only of the industry but of fire brigades, fire authorities, the insurance industry and many

property owners. It is, however, primarily about saving lives, and it behoves all of us to see what a relatively simple change in the legislation and regulations can achieve in saving lives. If we ensure that an automatic fire suppression system is a standard fitting for all new low-rise residential buildings, we will be able to save many, many lives. The Bill envisages an automatic system that will involve no human intervention and is designed primarily to protect lives rather than property and to deal with fire. Apart from arguments about cost, doubts have been cast on the effectiveness of this, but very clear international studies, particularly from the USA and Canada, have been drawn to my attention. These show that when fire occurs, there are major reductions not only in deaths and injuries, which is the central purpose, but in the range of fire spread and resulting fire damage, in the resulting water damage, and indeed in the amount of water that is used, as my noble friend Lord Harrison has already said. Fitting automatic and effective sprinklers in residential premises is pretty much a no-brainer. Retrofitting the sprinklers would be much more expensive and much more difficult to justify, but the Bill does not deal with that; it deals with all new residential buildings and conversions to residential use. Those who are most at risk in situations of fire are the elderly, the infirm, the disabled, and possibly those who drink too much. In other words, all of us could be affected, including probably a fair cross-section of the population as a whole. Fitting such a system could be a life saver for any one of us, so I congratulate my noble friend on introducing this Bill and the organisations that have supported it, and I hope that the Government and this House will be prepared to take it forward.

10.25 am

Lord Hoyle: My Lords, I am speaking a little earlier in this debate than I expected. I, too, give big thanks to my good friend the noble Lord, Lord Harrison. It is wonderful that we have this opportunity to debate the Bill today. Externally, we are considering health and safety in the light of what has been happening this winter and the injuries that have occurred. Here today, we are considering what happens in buildings. It is very important to say that, because we have a tendency to forget it. Deaths and injuries in buildings do not occur in the same numbers as they do in emergencies throughout the world, but they occur all the time and we should certainly look at anything that we can do to save lives. No one would dispute that fitting sprinklers in all new builds would be effective. We could incorporate that. As has been said, we are looking at a number of people who are vulnerable in this respect. As my noble friend Lord Whitty said, they are not just in this House. Middle-aged people, usually between 40 and 59, who smoke and drink at home are also vulnerable. The elderly—I will come back to them in a moment—are particularly vulnerable, as are people with disabilities, as they are less likely to be able to get out in time. We must bear in mind that young people, including students, also come into this category. We are looking at a widespread of the population. Another thing that will be even more of a concern in the future is that we are, unfortunately, becoming an elderly society. More and more of us, as we see in this House, are living for longer. On the other hand, fewer people will go into homes. Many of them will stay in their own homes. They

are vulnerable, and this measure will be of great assistance to such people. A lot has been said about the cost of fire. As my noble friend Lord Harrison said, the costs are staggering: £7.3 billion. The cost of each fire is almost £25,000, of which the economic cost of deaths is £14,600 and the cost of property damage is £7,300. That is a huge cost to our society. My good friend the Minister always tries to be helpful, and I am pleased that he is replying to the debate. He may well dwell on the report which my noble friend Lord Harrison mentioned again. When the proposal was looked at, the Government did not really think that it was cost-effective. As my noble friend has said, there are defects in that report. One of the two studies looked at was dated 1984, but sprinklers were only authorised in 1981, so that could not have been an in-depth study. The second study was done after 2000; as do most studies, it looked at what occurred in this country, rather than, as my noble friend Lord Harrison, said, taking a worldwide view. Why not look at what has happened in Vancouver, where deaths have dropped to almost nil, or Arizona, where a similar story is told? That would make a huge difference. The BRE report, which looked at this country, concluded that there could be about a 70 per cent reduction in deaths, which is quite large, a 30 per cent reduction in injuries and a 50 per cent reduction in property damage. However, if we look at what has happened in practical terms in Arizona and Vancouver, we will find a different story. There has been a 100 per cent reduction in the number of deaths: there are no deaths. There has been an 85 per cent reduction in injuries, which is quite different to our 30 per cent. In addition, there is a 90 per cent reduction in property damage. I hope that my noble friend will be able to reply to that, because those figures may be quite different to those which he may have for presenting to the House. I hope that he will take some advice on that. I do not think that anyone could argue about the merits of the Bill. They could argue about the cost. The cost of fitting sprinklers would be between 1 per cent and 2 per cent in new-build properties. Maintenance could cost between £85 and £150 per year. But if they were fitted on all new-build houses, we should be able to bring down those costs substantially. It is worth having another look at this. As my noble friend has said, there is no reason why this small Bill could not go through both Houses and be incorporated into law. Furthermore, lives could be saved. I hope that we will get a positive response when my noble friend replies.

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10.32 am

Baroness Hamwee: My Lords, from these Benches, we congratulate the noble Lord, Lord Harrison, on introducing this Bill. We, too, look for a positive response from the Government. He used the term “breathing space”. I do not know whether he realised how apt that phrase was, but, given the loss of life from smoke inhalation, it is a particularly appropriate term. I have been briefed by the London Fire and Emergency Planning Authority as well as by the Staffordshire fire and rescue service, and I am grateful to both. LFEPA makes the point, as have other noble Lords, about the importance of providing for vulnerable people.

I know that LFEPA has—I am sure that other authorities have as well but I do not know them in the same way—a record of investigating proportionate risks and of assisting groups who are at most risk. It says that the impact of fire is grossly disproportionate, with 30 per cent of fire victims having limited mobility. I do not propose to pursue the categories of infirm, elderly and inebriated as applying to “us”, as mentioned by the noble Lord, Lord Whitty. As we know, the average age of this House is rather high and, as the noble Lord, Lord Hoyle, has said, the category of people who are most at risk is single middle-aged people between 40 and 59 who drink and smoke at home. I am told that 99 per cent of fires in buildings fully protected by sprinklers are controlled and that the safety of firefighters tackling fires is improved because sprinklers reduce the risk of flashover and backdraft. However, we still have the tragedy of firefighters, as well as people in buildings, dying in fires. I am interested, too, in the small amount of water that has to be used, which seems to highlight the efficiency of sprinkler systems. We are told that they can be very sensitive. Often in a room with two sprinkler heads, only one may operate if that is all that is needed. I am sure that those who have concerns about sprinklers will welcome the advance of technology. My experience of sprinklers being activated in a public building was that the water came down through about three floors, which was not very comfortable but much better than the building going up in smoke. I contacted the British Property Federation. I accept that this Bill is about saving lives, but it seemed useful to get some comments from the property world. The London authority told me that installing sprinklers is now about 1 per cent of the total build cost, which may be reduced with new building methods. Cost is of concern to the property industry. The BPF says that given the state of the housing market it is concerned about this. I do not know whether the noble Lord has any comments to make on that. It also says that its other major concern would be tenanted properties. Putting it carefully, the BPF says: “Not all tenants are angels and you can imagine the damage and disruption that would be caused in a property by tenants fooling around and setting off the sprinkler system”. Its comment that, “in an era of better and less regulation this is not practical”, deserves to be put on the record. To my mind, the balance is entirely in favour of the Bill, but I felt that these comments should be included in the debate. We support the noble Lord.

10.38 am

Earl Cathcart: My Lords, I should declare that I am involved in the property and insurance markets. I, too, thank and congratulate the noble Lord, Lord Harrison, on introducing this Bill. His objective is to reduce death and injury from fires in new-build housing in England and I can assure him that we certainly welcome such a goal. As the noble Lord, Lord Harrison, has already said, regulations already ensure that new residential blocks more than 30 metres high must be fitted with sprinklers. New schools, residential care homes and new large single story retail buildings will all be similarly protected under changes to the building regulations. The Bill would extend the use of sprinklers to new residential and substantially renovated homes. We on these Benches are certainly receptive to

new and innovative ways of increasing fire safety. The noble Lord, Lord Harrison, has put his arguments convincingly. However, if the Minister is minded to support this Bill, I would like to play devil's advocate and ask him whether he has considered the following points. As we have heard, the installation of sprinklers in all new homes would incur an immediate capital cost, which may have unintended effects on the housing industry, especially in the current market. There will also be ongoing costs to maintain these systems. The estimated cost of installing a low-cost sprinkler system in a new home is around £500. Would this fall on the developer or, more probably, be passed on to the initial purchaser of the property? I hope to hear from the Minister about how the water supply can affect the operation of sprinkler systems. Automatic sprinkler systems may have their water supplied independently of domestic or industrial supplies and need not be metered, dependent on the provision of adequate safeguards against fraud. Has the noble Lord thought about how this fraud could be monitored, and with whom the responsibility for such enforcement would lie? In 2007, a Communities and Local Government report stated that the minimum service supply pressures that water authorities must achieve are well below those required by residential sprinkler systems. This problem would need to be addressed or we could end up with sprinklers that cannot do the job properly. To determine whether the required water pressure and the flow continue to be available, regular maintenance is needed to ensure that performance tests are carried out, at an estimated cost of £75 to £100 a year. Does the Minister feel that all the households affected can afford that? In addition, a recent report by the Fire Protection Association states: "Any future deficiency of the automatic fire sprinkler system due to changes in the water supply characteristics shall be the responsibility of the property owner to remedy at their own expense". So that is yet another significant extra charge for the householder somewhere down the line. One might expect there to be an offset of these costs through lower insurance premiums. Will the Government discuss this possibility with the Association of British Insurers? I understand that most sprinkler systems are wet pipe systems, meaning the piping is always filled with water. As the recent spate of cold weather should remind us, those pipes can freeze and burst. Who would be responsible for ensuring that home owners are informed about methods to keep sprinkler systems from freezing? Indeed, what might those methods be, and at what cost? Would there need to be a duty imposed upon the home owner to make immediate repairs in the event of damage, at a cost? Would there be a responsibility on home owners to have these systems inspected prior to the reselling of the dwelling, and who would be expected to cover the costs, the vendor or the purchaser? Does the Minister have any information on what effect that might have on the housing market, which already has to contend with the cost of HIPs, EPCs, stamp duty and the rest associated with house sales? As the noble Lord, Lord Harrison, pointed out, the changes he proposes to the building regulations will only affect new buildings and major refurbishments, but will not have an impact on the existing building stock. Given that 85 per cent of existing homes will still be in use in 2050, does the Minister agree that it may be worth holding off on the proposals in this Bill until the economy is more stable and fire

suppression systems are sufficiently advanced as to warrant their installation en masse? Does he further agree that the Government ought to consult with the construction industry, the insurance industry and representatives of the fire service to consider what can be done to better understand the fire performance of modern methods of construction building types and how to reduce the risks associated with them? Here I am talking about open plan layouts and construction materials. The proposals in this Bill certainly merit consideration, and as I have made clear, the Conservative Party is certainly open to innovative suggestions to improve fire safety. However, I have raised a number of questions about the cost, implementation and maintenance requirements of installing sprinkler systems in individual homes. I had not intended to dampen the general enthusiasm for this Bill and I am sure that my queries are not insurmountable. I look forward to the Minister's response.

10.45 am

The Parliamentary Under-Secretary of State, Department for Communities and Local Government & Department for Work and Pensions (Lord McKenzie of Luton):

My Lords, I congratulate my noble friend Lord Harrison on securing this Private Member's Bill. Fire safety is a most important subject, one in which he has previously taken a considerable personal interest, and I thank all noble Lords who have contributed to the debate. A number of noble Lords, including my noble friends Lord Whitty and Lord Brookman, and the noble Baroness, Lady Hamwee, have stated explicitly that this Bill is about saving lives. Moreover, as my noble friend Lord Whitty identified, it proposes to proceed via the route of the building regulations, so it is not about retrofitting existing properties. In England, we have a strong record in fire prevention, a record of which I think we can be proud, but not complacent. The latest fire statistics show improvement, with fire deaths in the home in England at their lowest since 1980, and the long-term trend is downwards. In 1997, 362 people perished in domestic house fires in England compared with the figure of 217 fire deaths in the home in 2008. But let me be clear: one death is one too many. Since 1997, our key strategy to drive down preventable fire deaths has been through proactive community fire safety activities, a discipline that involves efforts to reduce the incidence of fire through education, information and publicity. Indeed, few people may realise the impact which fire has on our society. Although people are very frightened of having a fire and its potential consequences, they do not believe that it will happen to them. But the impact of fires on families and households is often greater than many crimes. It can wipe out entire families in one go, kill all the children, or have a lifelong impact with terrible injuries on those who may survive. Even if casualties do not arise, the impact of needing to be rehoused and losing all possessions, photographs, memories and treasured items can be very profound. Most fires in the home are preventable. Community fire safety is therefore about providing basic fire safety information to householders to help them alter their behaviour and to think more about fire safety as an important issue that could affect them

and their families. In particular, it is about reminding people of the importance of having working smoke alarms installed in their homes and testing them regularly, the safe disposal of smoking products, and about taking extra care when cooking with fat, using grill pans and so on. The installation of properly maintained smoke alarms in every household has been the centrepiece of our efforts to reduce fire deaths in the home as they provide the vital early warning of fire and help people to escape. Through the Fire Kills campaign, the Government have conducted high-profile national television campaigns promoting smoke alarms and maintenance messages which have proved very successful. Ownership of smoke alarms in England now stands at 85 per cent of households and we are seeking to raise that further, as evidence suggests that those without alarms are often in the groups that are most at risk from fire. The 85 per cent smoke alarm ownership figure is a real achievement. I am delighted to say that during the period 2004-08, the Government invested £25 million in grants to fire and rescue authorities, to whom I pay great tribute, to enable them to purchase smoke alarms for installation in domestic dwellings. This pump-priming funding stream has provided authorities with the resources to carry out home fire risk checks to target the most vulnerable people in society such as the elderly, mobility impaired and single parents. Our latest figures show that around 2 million home fire risk checks have been carried out in England, with more than 2.4 million smoke alarms being installed. This type of fire prevention work should now be mainstream for fire and rescue authorities. Since 2008-09, funding is now available through the revenue support grant that these authorities receive directly from central government. 711 *Building Regulations (Amendment) Bill* [15 JANUARY 2010] *Building Regulations (Amendment) Bill* 712 [LORD MCKENZIE OF LUTON] The increase in the ownership of smoke alarms as a result of these campaigns and other actions is a success story. In 1987, only 9 per cent of dwellings were fitted with smoke alarms, but as I have said, by 2007, this had risen to 85 per cent. Indeed, in the social rented sector, the English house condition survey suggested that in 2007 more than 88 per cent of homes had smoke alarms, with nearly 40 per cent of them being hard-wired, mains-powered alarms. I am confident that these figures will be even higher as we reach the end of 2009 and move into the current year. Sadly, a percentage of households remain resistant to our messages and, in the first instance, each of us must take responsibility for safety in our own households. Of course there is a place for regulation where it is appropriate and justified to help make people safer from fire, particularly where they are vulnerable or where the risk of fire is outside their control. Duties are imposed on landlords through the licensing measures for houses in multiple occupation and under the Housing, Health and Safety Rating System, and the requirements of the Regulatory Reform (Fire Safety) Order impose duties on people responsible for commercial premises and for the communal parts of blocks of flats. Through the building regulations, we also have a powerful tool at our disposal to design out the life safety risk of fire in newly-built or altered buildings. Part B of the regulations and its supporting Approved Document have extensive provisions for the means of escape, means of warning, means of restricting fire spread and access for the Fire and Rescue

Service. The provision since 1992 for all new-build dwellings to have hard-wired, interconnected smoke alarms, along with our on-going campaigns promoting their use, has contributed to that success. The Government are aware of the calls that this Bill exemplifies for the building regulations to be amended further to require sprinklers in new dwellings and other types of new buildings. We recognise that sprinklers have an important role to play and there are already provisions in place for their use. Our view is that sprinkler provision should form part of a package of measures. However, some stakeholders have persistently argued for more regulation to require sprinklers in new build. I have already mentioned Part B of the building regulations. Requirement B3 of the regulations, which deals with internal fire spread within a building, already sets out that, subject to the size and intended use of the building, suitable fire suppression systems, such as sprinklers, and sub-division by fire resisting construction should be provided. My department issues guidance in the form of Approved Document B, which sets out what is considered to be a reasonable provision to satisfy the requirements of Part B. This guidance is developed using the best available evidence and expert advice and with the assistance of the Building Regulations Advisory Committee. Any new measure we introduce through the building regulations—the noble Earl, Lord Cathcart, touched on this issue—must be proportionate, evidence based and justified in terms of the lives they save and the injuries they prevent. Before any new measure is introduced, the Government's policies on better regulation require the department to carry out an impact assessment. This involves estimating the potential costs and benefits of introducing the measures to ensure that those measures that are introduced are demonstrably proportionate to the problem they seek to address. This impact assessment, along with the draft Approved Document and supporting research findings, are then published and are subject to a public consultation exercise. My department has recently undertaken a review of Part B and its Approved Document and the subsequent revisions resulting from that review took effect on 6 April 2007. As one might imagine, the review looked at the potential of extending the existing provisions for fire suppression to residential premises. This review drew on an extensive four-year research project looking at the issue of residential and domestic sprinklers from both an effectiveness and cost-benefit perspective. The conclusions are clear: sprinklers are an effective measure but it would not be cost-effective to impose their installation on all new residential buildings. However, there was a case for higher risk buildings. A number of noble Lords mentioned the research which led to the current guidance on residential properties. It was an extensive four-year project and the methodology used in the cost-benefit analysis was developed in consultation across the industry group, including the Fire and Rescue Service and the sprinkler industry. A similar cost-benefit exercise carried out in the US by the National Institute of Science and Technology reached a similar conclusion. The revised Approved Document B (Fire Safety) therefore included a provision for sprinklers to be installed in tall blocks of flats over 30 metres in height—a matter to which my noble friend Lord Harrison referred—and included their use as an option in residential care homes. This option offers an alternative to an otherwise more onerous set of standards

for care homes introduced at the same time. This is one of a range of measures which can be varied where sprinkler systems are installed. The benefits that such installations can offer are explained in the Approved Document and the guidance can be structured such that those benefits are realised in reduced construction costs. The process to review the buildings regulations was overseen and supported by both the main Building Regulations Advisory Committee and its Fire Safety Working Group, which comprise key stakeholders, such as the Business and Community Safety Forum, the Fire Brigades Union and the Chief Fire Officers Association. As set out in our implementation plan for the future of building control, my department currently has no plans to review the fire safety elements of the building regulations again until 2013. In the mean time, we continue to consider and develop the evidence base in preparation for that review. I am sure that some might consider that this is a rather long timescale, but these are not simple matters. The standards of fire protection in modern buildings are very high and the casualty figures are, thankfully, low. We cannot justify imposing further burdens on industry—a point pressed by the noble Earl—without targeting them at where they can be most effective. That said, and as part of our collective desire to see buildings which are even more sustainable, we are exploring the impact of fire and fire protection *Building Regulations (Amendment) Bill* [LORDS] *Building Regulations (Amendment) Bill 714* on the environment. The changes made to the Building Act 1984 by the Sustainable and Secure Buildings Act 2004 extends the scope of building regulations to include requirements made for sustainability purposes. My department commissioned a scoping study to consider this issue and the available evidence and to identify a way forward. The report from this project is due to be published shortly and will help to inform this important debate. While we do not consider there is a case for more regulation now, we are looking at what we might do to encourage or facilitate the greater use and installation of sprinklers through non-regulatory routes. We have therefore commissioned three research projects to help facilitate this process. These relate to low-cost sprinklers, the cost-benefits of sprinklers in areas of new homes and the cost-effectiveness of sprinklers in high-risk buildings. On the low-cost sprinkler project, a major barrier to the wider use of sprinklers in the domestic market has been that they are expensive. My department has therefore undertaken research into the potential for lower cost domestic sprinkler systems. As a result of this research, and in collaboration with the Fire Protection Association, we have developed a design guide for such systems. Initial findings suggest that a lower cost system can be put into a new-build house and work effectively given adequate means of water pressure. A number of noble Lords have raised the issue of water usage. However, the water industry raised concerns about the design guide as it did not comply with the Water Supply (Water Fittings) Regulations 1999. However, we have worked with the water industry to resolve these issues and, I am pleased to say, we now have a system which complies with the water regulations. We are currently trialling the compliant lower-cost system in four fire and rescue authority areas—Lancashire, Kent, Suffolk and Northumberland. The pilots are designed to test cost assumptions and to iron out any technical issues during installation. We also

recognise that the Government's commitment to build new homes in areas such as the Thames Gateway presents challenges to the Fire and Rescue Service. As I have already explained, the Government do not legislate or regulate for the provision of sprinklers in domestic properties. Long-term research has demonstrated that the costs and benefits of doing so do not stack up; the costs are so high that it cannot be justified for life safety. However, we consider it worth revisiting the installation of sprinklers as an active protection measure where large numbers of houses are being built at one time. The CLG has therefore commissioned consultants to look at the costs and benefits of potential options to address the fire and community safety needs of areas of new build housing. As part of this we will revisit the work of the BRE, to which noble Lords have referred. There is no suggestion that by carrying out this work the Government would regulate for the installation of sprinklers in domestic properties; rather, they are looking for approaches that are persuasive enough for planning communities at the local level to consider the value added by non-statutory fire safety protection measures such as sprinklers. This work is nearing completion and we shall share the outcomes of the research with fire stakeholders at an event on 19 January. The third research project that my department has commissioned is looking at the cost-effectiveness of sprinklers in high-risk buildings. As part of this study, we wish to gain an understanding of the perceptions of building owners and occupiers as well as of designers involved in a building's construction or refurbishment. The key outcome of this work will be the development of a tool that building owners or responsible persons can use to establish the fire risk for their building, and what measures they can take to protect their building, their residents and their employees. The work should be complete by summer 2010. The Government have done much to exploit the benefits of sprinklers in reducing fire deaths and injuries. We are continuing to explore opportunities to encourage, where appropriate and justified, the greater use and installation of sprinklers through non-regulatory routes. As I have said, the Government take fire safety issues very seriously indeed. We are implementing a significant programme of work to drive down further fire deaths and injuries. To recap, I say that our fire safety strategies are succeeding. The latest fire statistics are improving; fire deaths in the home in England are at their lowest since the 1980s. The long-term trend is down. However, as I have said, one death is one too many, so we should never be complacent. Some international comparisons and issues were raised. Within the past couple of years, the Governments of the United States of America, Japan, Belarus and South Korea have been knocking on our door to learn about our work and successes. However, we cannot and will not be complacent. Government and fire and rescue service personnel have shown tremendous commitment to the fire safety agenda. Our challenge is to maintain the momentum. There is clearly a place for regulation. We have and will use it, but only where it is shown to be reasonable and proportionate to do so. I think my noble friend will understand from that our reservations about the precise focus of his Bill, but I believe that we have common cause in what we are seeking to achieve.

11.02 am

Lord Harrison: My Lords, I thank all noble Lords who have contributed to this debate, which has been sprinkled throughout with sense and sensibility and good humour. I thank all colleagues on the government Benches for adding to and adumbrating the speech that I had the privilege to make. I thank the noble Baroness Lady Hamwee, for her contribution concerning the London fire services. I assure the noble Earl, Lord Cathcart, that I did not take it as a dampener on proceedings that he should put the proper questions. I sensed a sprinkling of scepticism from my noble friend on the Front Bench, but I was encouraged by all the research that he has asked to be looked into and developed over the coming years. I hope that he will check the BRE report again, as he said that he would, just to get assurance. *Bill read a second time and committed to a Committee of the Whole House. 715 Building Regulations (Amendment) Bill [15 JANUARY 2010] Building Regulations (Amendment) Bill*
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