



March 2010

Jenny Jones AM

Our Ref:
London Assembly Planning and Housing Your Ref:
Committee
City Hall
The Queen's Walk
London SE1 2AA

## Investigation into fire safety in tall and timber framed buildings in London

You wrote on 5 February to officials in CLG and the Office of the Chief Fire and Rescue Adviser (CFRA) with information on the terms of reference of the Assembly's investigation into fire safety in London's tall and timber framed buildings, and seeking a CLG contribution to the 10 questions the Assembly's investigation is seeking to answer.

Your letters were sent to the Sustainable Buildings and Fire and Resilience Directorates, and to Peter Wise in CFRA. The note below and Annex set out a coordinated CLG/CFRA response to questions 1 – 8 only of those set out in your letter.

Whilst we have noted that the Assembly has defined tall buildings as those with five or more storeys, or more than 15 metres above ground, you will wish to be aware that CLG and the fire and rescue service, as result of the fire safety requirements in the Buildings Regulations, use a definition based on buildings of over 18 metres in height (which equates to 6 storeys, or more).

We would be interested in hearing the outcome of the meeting you plan to hold on 16 March. I am copying this letter electronically to Alexandra Beer, for information.

Yours sincerely

Department for Communities and Local Government Zone 3/D1 Eland House Bressenden Place London SW1E 5DU CLG response to the London Assembly's Planning and Housing Committee Investigation into fire safety in tall and timber framed buildings in London

1. Do you have any record of the number of fires in either tall or timber framed residential buildings in London either under construction or occupied? Are there any trends in terms of the causes of these fires and the seriousness of them over the last 20 years?

CLG hold a database of records of on incidents attended by the Fire and Rescue Service (FRS). Since 1994 this has recorded the height of buildings. Whilst information is available on the cause (ie, accidental or deliberate) and seriousness (as indicated by the number of casualties) of fires in tall buildings, there is significantly less good quality data available on whether fire incidents were in buildings either unoccupied or under construction.

Data on fires in timber framed buildings started more recently - in April 2009 - with the introduction of the new Fire and Rescue Incident Recording System, and data for 2009/10 will be available in August 2010.

The conclusions which are possible across each element of information requested are presented in Annex A. Where it is possible to identify a trend, this has been flat or slightly downward.

2. How does the London Fire Brigade or Local Building Control know whether tall or timber framed buildings are being constructed or refurbished? What information is supplied to them, and by whom?

Building Control Bodies (BCBs) receive detailed plans of proposed buildings as part of the buildings approvals process. BCBs are required (under article 45 of the Fire Safety Order and Building Regulation 13) to consult the local fire and rescue authorities as part of this process.

3. What are the relevant policies, plans or guidance in relation to construction, design, planning and fire safety that apply to the construction and subsequent occupation of both tall and timber framed residential buildings? What are the relevant regulations in relation to refurbishment of existing tall residential buildings?

Fire safety on construction sites is covered by the Construction (Design and Management) Regulations 2007 (CDM Regs) and the Regulatory Reform (Fire Safety) Order 2005 (the FSO). HSE has responsibility for policy and enforcement as regards self contained construction sites. Fire and Rescue Authorities have enforcement responsibility under the FSO for general fire safety precautions on partially occupied sites whilst HSE enforce 'process' fire precautions, ie, arrangements to ensure work processes do not start fires.

Building Regulations set out the requirements for the design and construction of new buildings, and those subject to major refurbishment, including fire safety.

The FSO sets out requirements for the safe operation and maintenance of all non-domestic premises, based on risk assessment. In residential buildings, the FSO applies to the common parts of the premises rather than to the individual dwellings themselves.

Part 1 of the Housing Act 2004, introduced the Housing Health and Safety Rating System (HHSRS) to ensure that dwellings are free from all serious (category 1) hazards, including fire.

If a property is found to contain a category 1 hazard, the local authority has a duty to take the most appropriate action in relation to the hazard.

4. What are the specific fire risk implications for various building designs, construction materials and construction methods in relation to both tall and timber framed residential buildings?

Fire presents risks in all forms of construction. The performance requirements of Building Regulations are applicable to all new buildings, regardless of the type of construction used.

The fire performance of completed timber framed buildings was an issue that was explored at length under a series of research projects collectively known as Timber Frame 2000. The general findings of this work were published in Multi-Storey Timber Frame Buildings a Design Guide (ISBN: 1860816053)

5. What are the specific fire risks associated with timber framed buildings under construction? Do current Regulations sufficiently control fire spread/external fire spread (both during construction and after completion)? What risks do other materials and construction methods pose in comparison?

Fire presents risks in all forms of construction. The performance requirements of Building Regulations are applicable to all new buildings, regardless of the type of construction used. During construction, the specific nature of the risks throughout the construction process will be determined through the process of risk assessment under the CDM and FSO.

6. What are the specific risks associated with both tall and timber framed buildings residential buildings that are occupied? What can compromise fire safety post construction?

All buildings represent a fire risk. The specific nature of the risks in individual buildings will be determined through the process of risk assessment under the FSO, taking account of the design, construction, management, and occupancy/use of the particular premises.

7. How have building regulations, fire safety codes and risk assessments developed over time in relation to both tall and timber framed residential buildings?

Since the introduction of the modern building regulations system in 1984 there have been 4 iterations of Approved Document B (Fire Safety). These were published in 1985, 1992, 2000 and 2006.

The Fire Precautions Act 1971, and prescriptive standards of fire safety, was abolished in replaced by the Regulatory Reform (Fire Safety) Order 2005 in October 2006.

8. What has been the impact of recent amendments to fire safety regulations for residential buildings under construction and occupied? What new guidance on either tall or timber framed buildings and fire safety is anticipated in the future?

The introduction of the FSO in October 2006 simplified fire safety legislation by bringing all the legislative requirements together in a single Order. It replaced over 70 separate pieces

of legislation and extended the principles of the 1997 Fire Precautions (Workplace) Regulations 1997, as amended, to all premises to which the public have access.

HSE are due to publish a revision of their publication HSG 168 – Fire Safety in Construction, later this year, having recently consulted on a draft. This will provide new guidance on the legislative requirements of the CDM Regulations and the FSO as well as detailed information on a range of appropriate risk mitigation measures for duty holders/responsible persons.

CLG (Housing and Fire Safety) are currently investigating with LACORS and other stakeholders whether additional fire safety and risk assessment guidance specifically for those with responsibility for blocks of purpose built flats, including those in tall buildings, would be helpful.

The CLG fire safety risk assessment guidance for less complex premises is available at <a href="https://www.communities.gov.uk/firesafety">www.communities.gov.uk/firesafety</a> along with the LACORS/CFOA/CIEH guidance on fire safety in certain types of housing. Guidance on the fire safety aspects of the Building Regulations is available at [BRIAN ??]

Annex A – CLG Analysis of dwelling fire Incidents in tall buildings, and dwelling fires incidents in all buildings that were under construction or unoccupied (1994 – 2008)

NB Analysis is limited by fluctuations, and reliable conclusions can only be reached from considering figures averaged over several years.

- 1. Proportion of all dwelling fire incidents that were in buildings of six or more storeys
- a) This was lower over 2004-2008 (14.1% in London and 6.1% across England) than over 1994-2003 (16.1% of incidents in London and 7.2% across England).
- b) The proportion of incidents which were apparently deliberate among all incidents in dwelling in buildings of 6+ storeys has also fallen from 30% for 1994-2003 to 25% in 2004-2008 in London, and almost identical proportions across England for the same periods.
- 2. Proportion of all dwelling fire casualties in buildings of six or more storeys
- a) Between 1994 and 2008 this has fluctuated between 11% and 17% of all dwelling fire casualties. The figures for all-England have fluctuated between 5.1% and 6.5%.
- b) There is no trend in the proportion of casualties that were from incidents in buildings of 6+ storeys which were apparently deliberate between 1994 and 2008. On average, around 29% of these casualties were from deliberate incidents in London and 23% across England.
- 3. Proportion of dwelling fire incidents in all buildings that were unoccupied

Around 1% of dwelling fire incidents in London were reported to be in unoccupied dwellings from 1997 to 2004 (around 50 per year), whereas the proportion was nearer to 0.5% in 2005 to 2007 (around 25 per year).

Because of the small numbers of incidents, no picture can be derived for the sub-group of dwellings in tall buildings. For the whole of England, there are too many incidents with occupation recorded as 'not specified' since 2004 to allow any meaningful analysis.

## 4. Proportion of all dwelling fire incidents in all buildings that were <u>under construction</u>

The numbers reported are too few to permit any conclusion of trend (between zero and twenty eight incidents each year in London, and between 70 and 150 fires per year across England).

The same conclusion necessarily follows for the subset of dwelling fire incidents in tall buildings.