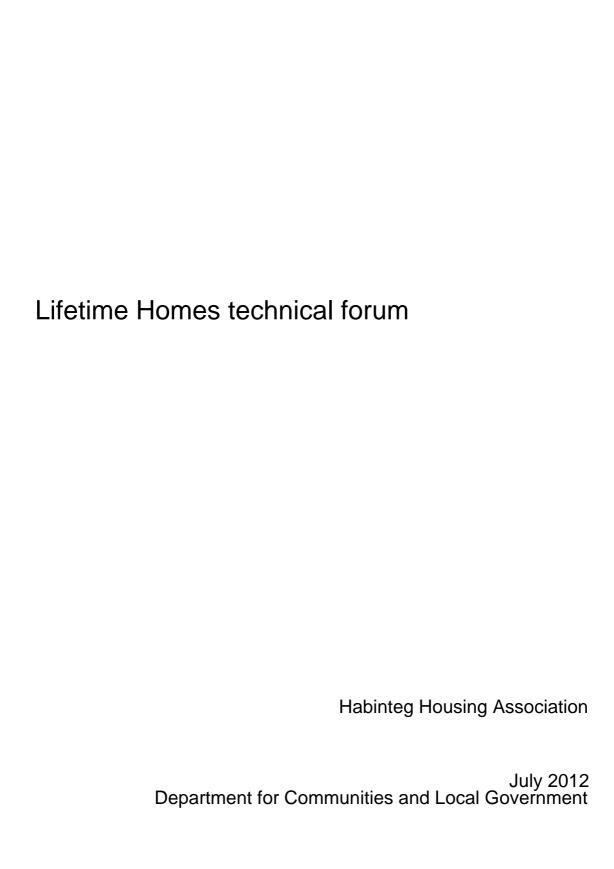
Lifetime Homes technical forum This research was commissioned by the previous government and is not necessarily a reflection of the current government's policies and priorities.

DCLG is publishing this report in the interests of transparency.



This research was commissioned by the previous government. The views and analysis expressed in this report are those of the authors and do not necessarily reflect those of the Department for Communities and Local Government. This document is being published in the interests of transparency.

© Queen's Printer and Controller of Her Majesty's Stationery Office, 2012

Copyright in the typographical arrangement rests with the Crown.

You may re-use this information (not including logos) free of charge in any format or medium, under the terms of the Open Government Licence. To view this licence, visit http://www.nationalarchives.gov.uk/doc/open-government-licence/ or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or e-mail: psi@nationalarchives.gsi.gov.uk.

This document/publication is also available on our website at www.communities.gov.uk

Any enquiries regarding this document/publication should be sent to us at:

Department for Communities and Local Government **Eland House** Bressenden Place London SW1E 5DU

Telephone: 030 3444 0000

July 2012

ISBN: 978-1-4098-2905-8

Contents

	Executive summary	4
1.	Introduction	7
2.	Methods	9
3.	Results	11
4.	Conclusions and recommendations	18
	Appendix 1 - Members of Technical Forum	22

Acknowledgements

Habinteg wishes to extend sincere thanks to members of the Lifetime Homes Technical Forum, who have generously given their time and shown strong support for the concept, vision and practical application of Lifetime Homes. Their combined knowledge and experience have been invaluable.

Executive summary

- Lifetime Homes are ordinary homes incorporating 16 Design Criteria
 that can be applied to new homes at low cost. The design features are
 intended to add to the convenience of the home and to support the
 changing needs of individuals and families at different stages of life.
 While some of the Lifetime Homes features are evident from the outset,
 others are latent and only come into play if the need arises.
- The Lifetime Homes Technical Forum was set up to bring together a
 group of housing experts for discussion and debate on implementation
 of the Lifetime Homes standard in publicly funded housing. The aims
 were: To help clarify the application of the standard; to indicate ways in
 which it might be developed or refined; and to provide feedback on
 these issues to the Department for Communities and Local
 Government (DCLG).
- Habinteg Housing Association organised and chaired three meetings of the Technical Forum between June and September 2009. The 21 members of the Forum included architects, developers, access consultants, housing association development staff, local authority policy and planning officers, an occupational therapist and officers from Habinteg and the Homes and Communities Agency.
- Some Forum members were also recruited to Habinteg's Technical Advisory Group. The purpose of this group was to review the Lifetime Homes design criteria with a view to proposing and applying any changes to the standard. Some of the Forum recommendations have been taken up by the Technical Advisory Group and have informed proposed revisions to the Lifetime Homes criteria, which went out for consultation in December 2009.

Key findings from the Forum were:

- The Forum members agreed that the current state of the housing market has led to increased fluidity between the private sale and social housing sectors - properties switching sectors according to market demand. It was also noted that modern construction methods and volume building tend to promote greater standardisation. The group agreed to include consideration of how Lifetime Homes design affects both the public and private sectors - and where the key differences lie.
- Forum members gave presentations on a number of issues where they felt there was a need for revision or updating of the criteria or guidance. These included: bathrooms (size and layout); tracking for hoists; stairs and lifts; doors and hallways; kitchens (location and layout); switches, sockets and controls; and communal parking areas. The group also discussed the effect of space standards and environmental factors.

- The group agreed that revised guidance must take account of all house types and both high density and low density developments. A review of particular criteria is also needed to address the concerns of the house building industry, with regard to issues of marketability, aesthetics and cost-effectiveness (e.g. transfer zones and service runs in bathrooms).
- The Forum members agreed that further explanation should be offered in the guidance where the requirements have apparent anomalies (e.g. walk-up flats can comply with Lifetime Homes but there cannot be any steps to entrances in other house types).
- The arguments for and against a more flexible approach to compliance
 with the standard was a recurrent theme. Some Forum members were
 concerned that it is difficult or impossible to comply with all the criteria
 in certain locations (e.g. steep sites) and with some house types. They
 argued that the 'all or nothing' approach to compliance means that
 there is no gain for the developer in adopting just some of the criteria.
- Against this, there was considerable concern that any 'waiver' system
 would weaken and dilute Lifetime Homes as a national standard. There
 was also concern about how it would be formally assessed within the
 Code for Sustainable Homes and how agreement would be reached on
 partial compliance.
- The group agreed that the issue of space standards in new housing is
 of major relevance to Lifetime Homes, as larger footprints and spaces
 throughout the home make it much easier for properties to comply with
 the standard. More generous space standards also offer architects and
 developers increased scope to decide on suitable design solutions and
 introduce innovation and flexibility.
- The Forum noted that the general lack of storage space in new homes has a particular impact on people with mobility problems, who may have additional equipment for inside or outside use. This is not covered by the Lifetime Homes guidance but is an industry-wide issue of high importance.
- Lifts and stairs in communal areas within blocks of flats raise several
 issues for Lifetime Homes, including: Access to flats on upper floors;
 size/number of lifts; fire escape and evacuation from upper floors.
 Forum members were concerned that Lifetime Homes could not 'take
 the burden' of deciding on these issues, but that it is vitally important
 that the principles of Lifetime Homes are taken into account in future
 regulation, guidance and good practice recommendations.
- Communal parking is an area where Forum members agreed that the guidance should be extended. It was recognised that many issues would be determined by local parking policies, especially in large cities where there is a wide variety of high density developments (including car free schemes). As with communal lifts and stairs, the Forum

advised that future policy and guidance on parking should take account of Lifetime Homes principles.

1. Introduction

1.1 Technical forum project

In early 2008, The Department for Communities and Local Government (DCLG) launched *Lifetime Homes, Lifetime Neighbourhoods: A national strategy for housing in an ageing society.* The strategy made a commitment that all new homes receiving public funding would be built to the Lifetime Homes standard by 2011. Beyond this, it stated an ambition to see all new homes in England built to the Lifetime Homes standard by 2013.

The Lifetime Homes Technical Forum was established to bring together a group of housing experts for discussion and debate on the implementation of the Lifetime Homes standard in publicly funded housing. The broad aims of the project were to help clarify the application of the standard and to indicate ways in which it might be developed or refined. The Technical Forum is one of a number of initiatives taken by DCLG to draw on the knowledge and experience of architects, developers and others in the house building industry and to receive feedback on the implementation of Government policy on Lifetime Homes.

1.2 Purpose of report

This report describes the operation of the project and summarises the Forum discussions on each substantive issue. It highlights the key concerns considered by the group, the range of views and ideas put forward and possible solutions to the complex or problematic aspects of applying Lifetime Homes design in all types of new housing. The group also debated ideas for changes to the existing design criteria and made recommendations for further review.

The purpose of the report is to inform further consideration, by DCLG and other relevant authorities and expert organisations, of the principles, objectives and design criteria encompassed by 'Lifetime Homes'. This in turn will affect the specific and detailed guidance to be provided to house builders, architects, assessors, planners, access consultants, occupational therapists and others involved in the development and effective application of Lifetime Homes. The report also mentions issues discussed by the Forum that are relevant and of interest but fall outside (or not fully within) the scope of the Lifetime Homes standard and design criteria.

1.3 Aims and scope of Lifetime Homes

The concept of Lifetime Homes was developed in the early 1990s by a group of housing experts, including Habinteg Housing Association and the Joseph Rowntree Foundation. The principles of Lifetime Homes have supported the growing demand for choice, flexibility and independence among disabled people of all ages, as well as promoting high quality and thoughtful housing design for the general population.

Lifetime Homes are ordinary homes incorporating 16 Design Criteria that can be applied to new homes at minimal cost. Each design feature adds to the comfort and convenience of the home and supports the changing needs of individuals and families at different stages of life. While some of the Lifetime Homes design features are evident from the outset, other features are 'latent' and only come into play if the need arises. Overall, the effect is quite subtle.

Lifetime Homes emphasise flexibility, convenience and enabling choice. They introduce some adaptability into the housing layout and design so that simple adaptations can be carried out in the future, if necessary. From raising small children to coping with illness or dealing with reduced mobility in later life, Lifetime Homes make the ups and downs of daily living easier to manage. They do not offer full wheelchair standard accessibility but they do provide a high degree of 'visitability' for wheelchair users.

The Lifetime Homes standard, with its 16 design criteria covering different areas and aspects of the home, fits with the wider concept of Inclusive Design. The aim of inclusive design is that products and services should be designed to be easily used by as many people as possible. This should not compromise other elements of good design, so inclusive design also has to encompass the creation of aesthetically pleasing objects, places and spaces that function efficiently, do not appear 'special' and suit their purpose. The general ethos of inclusive design is user-centred, aware of consumer needs and wishes and responsive to changing demands on businesses, designers, planners and service managers.

2. Methods

2.1 Format and meetings

Three meetings of the Lifetime Homes Technical Forum were held between June and September 2009. The meetings were chaired and facilitated by Habinteg and held at Habinteg's London offices (2) and at the National Federation of Housing Associations (1). Habinteg provided the secretarial support and detailed notes were taken of each meeting. The meetings were held boardroom-style and scheduled for five hours (10.00 – 15.00).

Habinteg prepared an agenda and topic guide to ensure that the discussion covered all the issues of concern and interest to the group. Forum members took an active role in determining the items for discussion and volunteered to make presentations. Several members also submitted their views on specific items by email or telephone between the meetings.

Meeting 1 was largely taken up with introductions, exploration of the different viewpoints represented (developers, local authority planners, architect firms working with housing associations etc) and scoping of the agenda issues for the subsequent meetings. The group also clarified the role of the Forum in providing feedback to DCLG and its links to other groups and initiatives relating to Lifetime Homes.

Meeting 2 began with discussion of the requirement to meet all 16 design criteria in order to achieve compliance with the Lifetime Homes standard - and the potential benefits/pitfalls of bringing in more flexibility. The group went on to hear and discuss detailed presentations on the topics of hoists and bathrooms and debated various points raised in relation to: Stairs and lifts; doorways and hallways; and turning and circulation.

In Meeting 3, the group received an update on the work of other bodies, such as the Building Regulations Advisory Committee Part M working group, which is preparing a consultation report on Lifetime Homes for the British Standards Institute. Forum members then gave presentations and suggested possible revisions and additions in respect of: Parking; switches, sockets and controls; kitchens; environmental factors; and space standards.

2.2 Forum membership

The members of the Technical Forum were recruited through telephone and email contact, using the extended networks of DCLG, Habinteg and the Homes and Communities Agency. The invitation to join the Forum was initially taken up by 20 people (excluding Habinteg) but in the event four were unable to attend on any of the dates and attendance at the three meetings varied from 12 to 18 (plus three or four Habinteg staff). The participants included architects, developers, access consultants, housing association development managers, local authority policy and planning officers, an occupational

therapist and staff from the Homes and Communities Agency. A list of members is included at Appendix 1.

Some members of the Forum were also recruited to Habinteg's Technical Advisory Group. The purpose of this second group, which held its first meeting shortly after the final meeting of the Technical Forum, was to review the Lifetime Homes design criteria with a view to proposing and applying any changes to the standard.

2.3 Scope of debate

A number of themes were identified and publicised by Habinteg in advance of the first meeting. This was done to help ensure that the discussion kept to its two principal aims: Providing feedback to DCLG on issues and concerns; and examining the practical problems encountered in the task of implementing Lifetime Homes on the ground. The themes were:

- Technical and location/space/density/cost concerns.
- Misunderstandings and need for clearer guidance.
- Current requirements falling short of good practice.
- Conflict with other guidance, policy or regulation.
- Regional/local, environmental and planning issues.
- Recommendations and need for evidence/research.

Other themes that were not anticipated also proved to be important threads throughout the Forum discussion. These themes included: The requirements and expectations of different tenures (public and private sector housing); and the argument for more flexibility in awarding of the Lifetime Homes standard (e.g. through 'waivers' in respect of certain criteria and situations).

3. Results

3.1 Summary points on each issue

Introduction

The Forum meetings produced lively debate and discussion. While on some issues there was consensus or broad agreement among the group members, on other matters there were widely divergent views, either on the statement of the perceived problem or on how it might be resolved.

The meetings were not constructed to include formal votes on suggestions or proposals for revision and it should be noted that some points included below were made by a small minority of group members. It is important to include these points as the intention of the Forum was to encourage and facilitate full debate. The Forum's conclusions and recommendations are set out in section 4 of the report.

3.1.1 Public and private sector housing

- The group agreed that the current state of the housing market has increased the need for fluidity between the private sale and social housing sectors i.e. properties switching sectors according to market demand. It was also noted that modern construction methods and volume building have tended to promote standardisation across sectors. Given this perceived convergence, the group agreed that it would make sense to consider how implementation of Lifetime Homes affects both the public and private sectors (and where the key differences lie).
- Forum members generally supported the view that the Lifetime Homes standard was coming in to house design in the private sector through use of the Code for Sustainable Homes. Some members reported that developers are now more likely to decide to meet all 16 criteria, in order to gain the maximum points in the Code. They considered that clear and detailed guidance on the criteria would encourage further take-up.
- Some Forum members said that two-bedroom flats for sale require an
 en-suite bathroom as well as a main bathroom. They expressed the
 view that if accessibility requirements make the main bathroom larger
 than normal, this can result in a disproportionate amount of space
 being taken up with bathrooms, leading to space compromises in other
 parts of the property.
- An architect commented that private sector homes frequently have tight stairs (often with winders) and no clear landing walls for fixing of standard stair lifts. The occupational therapist member said that stair lifts now have rails that overcome the need for clear landing walls, although the time taken to wait for rails to align can cause problems for people with standing difficulties. It was noted that stairs may also be

- narrower in private sale houses than the required clear 900mm from wall to closest obstruction.
- Following from the above, several members of the group agreed that private sale houses often give less easy access to (and within) the first floor.
- A concern for the local authority planners and policy staff in the group was that the private and public sectors have different expectations of communal lifts in blocks of flats – i.e. size and number of lifts. They also reported that the two sectors operate different communal parking arrangements.
- One member reported that open plan living can be popular in housing for sale, although they thought this was more evident in the South than the North of England. Local authority and housing association members reported that social landlords generally want separation of living/dining/kitchen functions. This was explained by the fact that full occupation, which is more usual in social housing, makes for 'busy' space.
- There was wide agreement that new properties are generally lacking in storage space. While this affects all households, the group noted that it is a particular issue for people who use mobility equipment and families with disabled children. This is not within the scope of the Lifetime Homes criteria but is an important point that the group thought should be properly addressed by the house building industry. Forum members agreed that there was no evidence that this was happening.
- One member of the group put forward the view that the social and cost benefits of Lifetime Homes are not yet proven and proper evaluation is needed. Several Forum members agreed with the expressed opinion that, to date, the design features (both apparent and 'latent') have not been regarded as making the property more marketable to the general buyer.

3.1.2 Flexibility in applying the standard

- Several members of the group felt that the 'all or nothing' approach to applying the Lifetime Homes standard under the Code is stringent and, in particular, does not take account of difficult sites where the internal criteria could still be fully incorporated. One member said that Part M can be more helpful, as it offers a choice of approach. Other Forum members cautioned that a system of waivers could be abused by those developers who want to pick and choose their accessibility features, leading to an overall weakening and dilution of the standard. The view was also expressed that differential levels of compliance would be difficult to agree and assess.
- An architect member said that if 100% of new build properties have to comply with Lifetime Homes, this rules out certain property types and homes in particularly difficult locations. Another Forum member was concerned that, if exemptions were allowed, some developers would seek exemptions for property types aimed at specific segments of the housing market e.g. pied-a-terre.

- The group agreed that certain house types do pose real difficulties for Lifetime Homes compliance (e.g. town houses and flats over garages) but there was insufficient time to discuss this in any depth, as originally planned for the third meeting.
- The group agreed that difficult sites tend to present two main challenges for Lifetime Homes compliance: Steep slopes; and site remediation (e.g. flood prevention). It was suggested by one member that certain anomalies could be overcome if it were possible to 'pass' for Lifetime Homes compliance on the internal criteria but not on all the external criteria (e.g. an external stepped approach is currently not allowed, while internal communal stairs are permissible). If partial compliance were allowed, the onus should then be on the developer to show that efforts have been made to comply and all options have been considered. This approach was supported by several members of the Forum, although others expressed strong reservations.
- An architect member commented that the issue of bathroom space, where there is also an en suite facility, is relevant to the flexibility argument i.e. the degree of adaptability might be allowed to vary. The occupational therapist member said that different types of household prefer different bathroom solutions (e.g. wet rooms are not so good for many families with children) and that cultural expectations of bathroom arrangements vary between ethnic and faith groups. A local authority member expressed the view that 'visitability' for wheelchair users needs to be maintained but this can clash at times with the demands on Lifetime Homes to meet the general needs of the population.
- An architect member informed the group that in Scotland, regulations on accessibility define access zones around components and appear to give architects more options for creating a suitable solution.
- One of the policy-oriented Forum members suggested that it might be profitable to focus on desired outcomes, rather than on specific design requirements. This approach would emphasise the principles and objectives and consider possible different ways of achieving them. The member considered that from this perspective, the technical specifications offer too narrow a set of requirements. It was agreed that the suggested alternative approach calls into question the application of Lifetime Homes as a technical standard measured against specific criteria. This caused concern for several members, who felt that the technical requirements should remain central to the standard.
- One member commented that Access Statements that refer to Lifetime Homes do not necessarily bear any relation to attaining the objectives. It was agreed that this was a crucial issue and that Access Statements in the Planning process could be much more useful than they are at present in facilitating inclusive design. The group agreed that it should not be left to Building Regulations.

3.1.3 Space standards

 The Homes and Communities Agency member reported that the Homes and Communities Agency is drawing up new design standards for any development involving public subsidy (there are currently three different systems of space standards, depending on the original source of funding). The new space standards are expected to be more generous than the current Homes and Communities Agency standards. There was group consensus that improved space standards are crucial to providing flexibility for future use and that they have benefits well beyond issues of accessibility and adaptability. It was also suggested that developers' resistance to Lifetime Homes would reduce if good space standards were mandatory. However, a local authority member commented that there could be a new set of problems if space standards increased only in the social housing sector.

- It was noted that the new London Housing Design Guide also proposes higher space standards to stop the building of 'cramped hobbit homes' that are the smallest in Europe (Mayor of London). The proposed new space standards for London are more generous than any of the three existing Homes and Communities Agency standards.
- A local authority member from London explained that the underlying philosophy of the London Housing Design Guide is to bring inclusive design into the mainstream and begin to move beyond technical 'tick box' standards, such as Lifetime Homes. The push to higher space standards in the Guide comes from factors such as overcrowding, need for work/study space and the needs of children, rather than primarily from accessibility concerns.
- The same member commented that, in London and other cities, there
 is a need for level access from flats to balconies so that they can be
 used as amenity/open space.
- One Forum member explained that incorporating the Lifetime Homes criteria into existing plan forms is difficult. It is a lot easier with new designs and portfolios. However, without some overall increase in space, the Forum member considered that there would always be an element of 'robbing Peter to pay Paul' i.e. smaller space in some areas to compensate for increased space where it is needed to meet the requirements. The same member felt that regulation on space standards could be a positive development for the private sector, as it would lead to greater consistency in land and property values.

3.1.4 Lifts and stairs

- The group noted that communal lifts and evacuation or escape from fire are separate and overlapping issues. It was reported that some local access groups have concerns about tall buildings with only one lift. A Forum member suggested that Building Regulations need to address the question of lifts and this was generally supported. The group also agreed that the Lifetime Homes standard cannot and should not take the burden of dealing with wider issues of fire safety and evacuation in high rise housing or marketability of flats in blocks with and without lift access.
- One member commented that there is resistance to installing stair lifts in communal areas, both from landlords and from other tenants or leaseholders. It was further noted that while stair lifts on communal

- stairs are generally regarded here as unsafe e.g. by the fire authority, they are in use in certain other countries of Europe.
- It was suggested and generally agreed that communal stair goings (treads) should ideally be 300mm deep to allow people to stand squarely and stop and rest. However, the group were not agreed on whether the minimum width should actually be raised from 250mm.
- It was noted that Lifetime Home flats above ground level do not require lift access. This causes comment from industry professionals, who see it as illogical. The group agreed that it is confusing that many of the internal criteria have wheelchair users in mind and yet they may not be able to get access into the Lifetime Home property in the first place. One member said that it should always be stressed that Lifetime Home features do not offer full wheelchair standard design.
- A local authority Forum member was concerned that walk-up flats on the first floor can comply with the Lifetime Homes standard, while a bungalow with front steps to the entrance cannot. The member said that this is another apparent anomaly, like the lack of lift access to flats above the ground floor, which, without proper explanation, can affect the credibility of the standard.

3.1.5 Hoists

- The occupational therapist member explained that good practice in using hoists involves keeping the distance that someone is hoisted to a minimum. Separate tracks can now be installed in each room and a ceiling track in two sets (with a gap for the door) is becoming more usual. While there is now a greater choice of hoists, the member said that it is still an undignified process and to be avoided if possible. Mobile hoists can be difficult to move over carpet and are not the easy solution some may think.
- Some members of the group questioned the need for adaptability to enable the installation of a hoist in a Lifetime Home, while others felt it was very important. It was agreed that there appeared to be a lack of information about the extent to which disabled people living in their own homes use ceiling track hoists. This was, for some members, an area where there should be a range of design solutions, with the focus on the end objective rather than the precise technical requirement.
- The group agreed that the Lifetime Homes guidance on hoist tracking should be rationalised and brought up to date. It was pointed out that the need for point tracking only in bathroom and bedroom – rather than a full tracking route – and the ability to retro-fit for point loading will all reduce the necessary initial works.

3.1.6 Bathrooms

 The group considered a number of design layouts for bathrooms and had detailed discussions on suitability of various features and facilities for wheelchair users and those with limited mobility. It was agreed that there was a need for more evidence about how disabled people

- actually approach/use bathroom facilities and what configuration and space standards would serve to accommodate most people.
- Members of the group were concerned with the practicality of achieving rational and neat services. Architect members commented that it is difficult, under current requirements, to get all components onto one wall (as preferred by the industry), without the bathroom becoming excessively large. In addition, it was suggested that unless bathroom layouts appeared 'normal and familiar', functional accessibility space could be lost by a subsequent refit of components by the household.
- Future adaptability to provide for improved access to the WC (rather than requiring a full side transfer space from the outset) was proposed. It was suggested that initial access (to achieve visitability) could be oblique, as long as improved side access, following adaptation, was achievable. A bathroom size of 2.1m squared was proposed by an architect member as offering initial accessibility, future adaptability and concealment of services, without giving disproportionate space to bathrooms.

3.1.7 Doorways and hallways

 It was proposed by an architect member that the requirements for door widths and hallways need to be rationalised and clarified. The group agreed that the relationship to current industry standard door sizes also needs to be more apparent. One member expressed the view that private developers want to minimise circulation and service spaces and maximise living areas.

3.1.8 Turning, circulation and kitchens

- Members of the group reinforced the point that open plan living, with combined kitchen and dining areas, is becoming more popular and works well for many disabled and older people. It was noted that private developers may currently operate with both 'closed plan' and 'open plan' designs, depending on the market and location.
- The group acknowledged that there is no Lifetime Homes guidance on circulation space in kitchens and most thought that this would be useful. Some members of the group went further by saying that kitchens should be a key accessible facility on entrance level and that advice on kitchen layout and accessibility should be much more detailed.
- One member outlined the typical problems with kitchens: They are too small; they have 'slot in' cooker spaces; the doors and windows are positioned so that the oven, hob and sink are not in the same 'run'; and there is no room for eating.
- The same member said that, for wheelchair users, hobs should have a separate space and not be on top of the oven. This point raised issues of general marketability for some members of the group.

3.1.9 Parking

- The group noted that there are currently no clear Lifetime Homes requirements and guidance on communal parking areas in higher density developments. It was agreed that this was now needed and that the specific requirements and guidance should address the issue of how many/what proportion of wider parking bays (or bays capable of widening) should be provided.
- One member pointed out that there will be difficulties in maintaining the number of accessible bays in mixed tenure schemes, as private parking spaces can be sold on. In many developments, parking bays are allocated to individual properties and there is therefore no control of future use. Despite these difficulties, some members felt that there should still be Lifetime Homes guidance and that the need to site accessible parking for visitors close to entrances should also be mentioned.
- In 'car free' schemes, developers should be expected to consider the needs of disabled residents who depend on their cars. Provision for mobility scooters is also an issue.
- It was noted that Code Assessors will find communal parking in high density schemes hard to assess but the group agreed that a 'one size fits all' approach was not suitable and adequate provision has to be decided by local policies.

3.1.10 Switches, sockets and controls

- Low consumer service units are considered by some to be a potential hazard for children. There was a lack of consensus on whether this was a real concern or an 'aesthetics issue'. The group agreed that where this is a concern, it can be minimised by placing controls that are not for everyday use in cupboards.
- The group agreed that there should be more guidance on types of windows and positioning of ironmongery. It was explained that more stringent requirements on thermal performance have led to heavier windows and these require more robust ironmongery. The same concern applies to entrance doors. It was agreed that ironmongery should not be specified in too much detail and that in some cases, for particular needs, suitable handles etc may be supplied as adaptations. The group agreed, however, that Lifetime Homes guidance must keep up with technical advances and changes in design/usage due to other factors and must offer relevant and current advice.
- An architect member pointed out that access to boiler controls can be difficult if boilers are installed in typical positions (i.e. in a run of wall units). Wireless controls may be a good solution and the cost of these is likely to come down. There was debate on which boiler controls need to be accessible, as different boilers have different controls. It was suggested that this depended on whether the boiler contained the day to day programmer/controls.
- It was proposed that the design criterion should be more explicit about which controls are expected to be within the specified height band. The

criterion generally relates to controls that need to be accessed on a day to day basis. It was explained that building regulations require electricity consumer units to be placed at an accessible height and lockable versions can assist where safety and potential interference are concerns.

4. Conclusions and recommendations

4.1 Introduction to conclusions

The Technical Forum discussions have highlighted a number of key issues of concern to members of a multi-disciplinary group of professionals, all of whom are involved in different ways with assisting policy implementation and improving practice in the development of Lifetime Homes.

On some of these issues, the recommendations of the Forum have already been taken up by the Technical Advisory Group and have informed proposed revisions to the Lifetime Homes criteria, which went out for consultation in December 2009. On other concerns, the recommendations are for more investigation and research that can inform better practice and ensure that the specifications and guidance are up to date and reflect preferred lifestyles, as well as technological advances and the practicalities of daily living.

Members of the Forum have acknowledged throughout that there is often no definitive solution and that a standard such as Lifetime Homes has to be considered and 'held up for inspection' on a continuing basis, as house building and design evolves in response to public demands, shifts in policy and changes in the wider economic and social climate.

The conclusions are presented briefly under four headings:

- Review of criteria and guidance
- Principles of Lifetime Homes and rationale for criteria
- Applying the Lifetime Homes standard
- Relevant issues beyond the scope of Lifetime Homes

4.2 Review of criteria and guidance

- **4.2.1** A number of the existing criteria should be carefully reviewed in order to ensure that they are in line with other current guidance and good practice (e.g. tracking for hoists).
- **4.2.2** A review (across all the criteria) is required to ensure that, as far as possible, guidance and/or best practice recommendations are offered on all house types and on both high density and low density developments (e.g. parking, stairs/lifts and access to entrances).
- **4.2.3** The Forum also identified significant areas where current guidance is lacking, regardless of the built form or house type (e.g. kitchens).
- **4.2.4** Finally, a review of particular criteria is needed to consider and take account of the expressed concerns of the house building industry, with

regard to issues of marketability, aesthetics and cost-effectiveness (e.g. transfer zones and service runs in bathrooms).

4.3 Principles of Lifetime Homes and rationale for criteria

- **4.3.1** Lifetime Homes design is based on five overarching principles, namely: Inclusiveness; accessibility; adaptability; sustainability; and good value. Following the work of the Technical Forum, which wanted the principles to have greater prominence in the guidance, these have been set out and described in the 2009 Lifetime Homes consultation paper.
- **4.3.2** Each of the 16 design criteria also has its own stated principle, which is intended to explain the rationale and objective underlying the particular criterion. These should be looked at and, if necessary, re-phrased to make them as clear as possible and to pre-empt confusion about the reason and logic behind the specifications.
- **4.3.3** Further explanation should also be offered in the guidance where there are apparent anomalies or contradictions in the requirements (e.g. walk-up flats can comply with Lifetime Homes but there should not be any steps to entrances in other house types).

4.4 Applying the Lifetime Homes standard

- 4.4.1 The 'pros and cons' of adopting a flexible approach to compliance with the standard was a recurrent theme in the Forum discussion. Members were concerned that it is difficult or impossible to comply with all the criteria in certain locations (e.g. steep sites) and with certain house types and that the 'all or nothing' approach to compliance means that there is no gain for the developer in adopting just some of the criteria. The possibility of dividing the 'externals' from the 'internals' and recognising partial compliance (on the internal features) was proposed as a possible solution.
- **4.4.2** Against this, there was considerable concern that such a 'waiver' could be abused and that it would weaken and dilute Lifetime Homes at a time when it is still in the early stages of implementation as a national standard backed by the Government. There was also concern about how it would be formally assessed within the Code and how agreement would be reached on partial compliance.
- 4.4.3 Some members of the Forum put forward the view that the crucial thing is that the preferred design solution meets the principles and objectives of Lifetime Homes, even if it differs in some respects from the technical specifications. This was also met with objections that, without clear and precise technical specifications, architects and developers would find it much harder to apply the standard than they do now.

4.5 Relevant issues beyond the scope of Lifetime Homes

- 4.5.1 The issue of space standards in new housing is of huge relevance to Lifetime Homes, as larger footprints and spaces throughout the home simply make it much easier for properties to comply with the standard. More generous space standards also offer architects and developers increased scope to decide on suitable design solutions and introduce innovation and flexibility.
- 4.5.2 On a more specific note, the general lack of storage space in new homes has a particular impact on people with mobility problems, who may have additional equipment for inside or outside use. This is not covered by the Lifetime Homes guidance but is an industry-wide issue of considerable importance.
- 4.5.3 Lifts and stairs in communal areas within blocks of flats raise several issues for Lifetime Homes, including: Access to flats on upper floors; use of stair lifts on communal stairs; requirements for lift installation and size/number of lifts; fire escape and evacuation from upper floors. Forum members were concerned that Lifetime Homes could not 'take the burden' of deciding on these issues, but that it is vitally important that the principles of Lifetime Homes are taken into account in future regulation, guidance and good practice recommendations.
- 4.5.4 Communal parking is an area where the Forum members felt that the guidance should be extended to include the number and location of accessible bays that should be provided. It was recognised that certain key issues would be determined by local parking policies, especially in large cities where there is a wide variety of high density developments (including car free schemes). As with lifts and stairs, future policy and guidance on parking should take account of Lifetime Homes principles.

Appendix 1 Members of Technical Forum

Adam Thomas (AT)	Design Matters	
Andrew Shipley (AS)	Equality and Human Rights Commission	
Brian Jardine	Joseph Rowntree Foundation	
Chris Goodman (CG)	Habinteg (Notes)	
Darryl Smith (DS)	City of Bradford Metropolitan District Council	
David Bonnett (DB)	David Bonnett Associates	
Derek Clarke (DC)	Homes and Communities Agency	
Gordon Allan (GA)	Brighton and Hove City Council	
John Barker (JB)	Portsmouth Housing Association	
Julia Park (JP)	Levitt Bernstein Architects	
Julie Fleck (JF)	Greater London Authority	
Kate Sheehan (KS)	Occupational Therapist	
Lesley Gibbs (LG)	PRP Architects	
Lynn Watson (LW)	Habinteg (Project Leader)	
Mike Donnelly (MD)	Habinteg (Chair)	
Paul Gamble (PG)	Habinteg	
Paul Jenkins (PJ)	Taylor Wimpey	
Rachael Marshall (RM)	David Bonnett Associates	
Simon Lovell (SL)	Taylor Wimpey	
Simon Toplis (ST)	HTA Architects	
Ziba Adrangi (ZA)	PRP Architects	