

Housing Committee – 6 December 2016

Transcript of Item 5 – Building Smaller Homes to Combat the Housing Crisis

Tom Copley AM (Deputy Chair in the Chair): Can I welcome our guests first of all? Toby Lloyd is Head of Housing Development at Shelter, Nick Cuff is Land Director at Pocket Living, Adam Challis is Head of Residential Research at Jones Lang LaSalle (JLL) and Julia Park is the Interim Chair of the Royal Institute of British Architects' (RIBA) Housing Group. Welcome to you all and thank you very much for being here this morning.

First of all, I wanted to ask Adam: given that we have only recently adopted national space standards, where is the argument for reducing them coming from and why?

Adam Challis (Head of Residential Research, Jones Lang LaSalle): The argument to at least open up a discussion around where space standards are appropriate is something that, although perhaps relatively new in the United Kingdom (UK) in terms of formal adoption, has been around for several years. You can see examples in global cities around the world – and we can come on to that later – where slightly more modest-sized homes – or whatever nomenclature we choose to use – are more common or are certainly in the frame.

In the more recent discussion over the last five or six years, certainly coming out of the downturn when we have seen in this city such extraordinary rates of house-price growth and rental growth against quite modest growth in average wages, the conversation becomes more important, once again, to reframe whether housing and space standards increase or purports that challenge of affordability or if, indeed, whether a modest reduction in space standards would open up affordability to a wider proportion of the population.

Tom Copley AM (Deputy Chair in the Chair): Is this driven by the market and, if not, who is pushing for this reduction in space standards?

Adam Challis (Head of Residential Research, Jones Lang LaSalle): Yes, certainly the market or a proportion of the market would like to see the conversation aired fully and completely. Some research that we conducted not all that long ago, a couple of years ago, suggested that from a demand perspective priority number one is the right location, priority number two is connectivity with public transport and unit size is down the list. It was behind those two.

Tom Copley AM (Deputy Chair in the Chair): Is this your research?

Adam Challis (Head of Residential Research, Jones Lang LaSalle): This is JLL research, yes. That is right. That was just 800-odd respondents giving a sense of the challenges they face in London in terms of housing today. We wanted to get a sense of a relative comparison with other forms of tenure; for example, against shared ownership. Would you want a smaller property that was fully owned as opposed to a larger property that was part-owned? The answer for about two-thirds or three-quarters leaned on the side of smaller but fully owned. That was an interesting sub-question within this conversation.

Also, we were just trying to get a sense or a gauge of what people are actually looking for and the way that people want to live in London today, accepting that there is a balance between what they want and the practicalities of what is available and what is affordable.

Tom Copley AM (Deputy Chair in the Chair): The question of a partially owned bigger home or a fully owned smaller home brings us nicely on to Nick Cuff. I wonder whether you could comment on this question of why now there is, having just adopted space standards, a push to reduce them.

Nick Cuff (Land Director, Pocket Living): To be very clear, from Pocket Living's point of view, we are comfortable with the space standards that have been set by the Mayor of London. The question we ask ourselves at Pocket is: how do we price in Londoners on modest to average incomes to reasonable incomes of £28,000 - broadly - to £50,000 into home ownership? The approach that we have pioneered in the business over the last ten years has been to design a 38-square metre flat. It is a compact unit but it sits within the London Plan guidelines. By delivering this unit, we price in approximately 150,000 Londoners into home ownership who would not be able to buy a starter home in the current market.

Tom Copley AM (Deputy Chair in the Chair): To be clear, it is within the space standards for a one-person, one-bedroom flat?

Nick Cuff (Land Director, Pocket Living): One-person, correct.

Tom Copley AM (Deputy Chair in the Chair): Of course, a lot of your flats will be occupied by couples, I presume.

Nick Cuff (Land Director, Pocket Living): At the moment, the data is showing that 90% of the buyers - and this is the first year we have really gone to a reasonable scale, by which I mean 200 completions - are singles and 10% are couples. We are very much --

Tom Copley AM (Deputy Chair in the Chair): Across your whole portfolio?

Nick Cuff (Land Director, Pocket Living): At the moment in the last year.

Tom Copley AM (Deputy Chair in the Chair): I see. Interesting.

Nick Cuff (Land Director, Pocket Living): We are finding very much that it is a single person's product rather than a household. We vet them. We are regulated and we regulate our product and so we know who is coming to buy. We make sure that it goes to those most in need of housing.

Tom Copley AM (Deputy Chair in the Chair): Can I bring you in now, Julia? Could you tell us how prevalent building under the space standards is in London?

Julia Park (Interim Chair, Housing Group, Royal Institute of British Architects): Do you mean how many homes are built below 37 square metres?

Tom Copley AM (Deputy Chair in the Chair): Yes.

Julia Park (Interim Chair, Housing Group, Royal Institute of British Architects): I honestly do not know, I am afraid. I am not sure that anybody knows. I certainly do not. I have examples of homes that are and developments that are. I have some with me. As you can imagine, permitted development rights (PDR) which allows for office-to-residential conversion has in particular led to lots of smaller homes because it is a straight pass[through the planning system]. I have some data from Croydon, which shows that the vast

majority in 2014 of PDR office-to-residential conversions were below the space standard. What else can I say about that? I have other examples and...

Tom Copley AM (Deputy Chair in the Chair): Perhaps you could talk to us a bit about the RIBA view on the question of why there has been this push perhaps back on the whole issue of space standards.

Julia Park (Interim Chair, Housing Group, Royal Institute of British Architects): To be honest, I am not sure that there is that much of a push. You have obviously heard it from somewhere. I do not know where that swell is coming from. You mentioned industry, but "industry" is all of us. I certainly have not heard any of our clients wishing to go smaller, other than to consider it because other people are and that sets up a chain reaction.

We have a scheme in the office now where the client suddenly wants to consider lots of micro-homes which are, by our definition anyway, below 37 square metres, somewhere typically between - I do not know - 15 and 25 square metres, often supported by some communal space. That is purely on the grounds of viability --

Leonie Cooper AM: Sorry, Julia. Can I just check? Did you say "15" square metres?

Julia Park (Interim Chair, Housing Group, Royal Institute of British Architects): Yes, 15. I have some here that are 13½ square metres. That is almost certainly smaller than your bedroom and that is apartments.

Leonie Cooper AM: That is definitely smaller than my bedroom in my Edwardian house. You are right.

Tom Copley AM (Deputy Chair in the Chair): Is this data or information you can make public to the Committee or is this --

Julia Park (Interim Chair, Housing Group, Royal Institute of British Architects): Absolutely. It is only anecdotal but, by virtue of quantity, I have --

Tom Copley AM (Deputy Chair in the Chair): If you could perhaps send it in to us afterwards, it would be very useful.

Julia Park (Interim Chair, Housing Group, Royal Institute of British Architects): Yes, absolutely.

Tom Copley AM (Deputy Chair in the Chair): I am astounded by that.

Leonie Cooper AM: I would quite like to see the layout of that, actually, to see how you could possibly --

Tom Copley AM (Deputy Chair in the Chair): Yes.

Julia Park (Interim Chair, Housing Group, Royal Institute of British Architects): It is quite handy. You can turn a hob into a bedside table quite easily. It is --

Leonie Cooper AM: It is so small that you could lie in bed and probably make tea at the same time in your own kitchen but not with a teasmade.

Julia Park (Interim Chair, Housing Group, Royal Institute of British Architects): Yes. It is definitely labour-saving.

Tom Copley AM (Deputy Chair in the Chair): That is amazing.

Julia Park (Interim Chair, Housing Group, Royal Institute of British Architects): In Hong Kong - and I know this is off the point - the latest living capsules are 2.2 square metres. You buy a little enclosed bunkbed with a sealed door and air conditioning and you share a kitchen and a bathroom with a dormitory full of people doing the same thing.

Tom Copley AM (Deputy Chair in the Chair): My goodness. I certainly do not think we want to be heading in that direction.

Julia Park (Interim Chair, Housing Group, Royal Institute of British Architects): No, absolutely, and I suppose it is always an easy argument for me to make with the thin end of the wedge, but I really do think we had a very robust debate during the examination-in-public (EIP) of the London Plan in 2008 first of all and then again with the Government's housing standards review. The space standard was interrogated all over again. It was not just accepted that London had one and so that is the one we might as well use. We really did rehearse all the arguments and all the pros and cons and the public gave an 80% mandate to the need for a space standard.

Therefore, it would be difficult to say that going smaller would be life-threatening. Space is not really like that. However, it would be certainly fair to say that going smaller would be life-limiting.

Sian Berry AM: Our reactions to the idea of living in 13 square metres were quite obvious there. There seem to be social implications here and I just wondered, from Shelter's point of view, in social terms, how important a space standard is.

Toby Lloyd (Head of Housing Development, Shelter): They are absolutely critical. I am almost amused that people find it shocking to think that anyone could live in 13 square metres when we have examples of people having to live in 2.2. That is the logic. That is why we have minimum standards. The logic is inexorable. You will always be able to squeeze a little bit more space out of people's lives and a little bit more profit out of valuable real estate. That is why we have to have minimum space standards. The only question is where you draw that line. Julia [Park] is entirely right that you can always make a case for pushing it just that little bit more or maybe making an exception in just this one case, but that makes a mockery of the entire system.

The social consequences are very well known because we have them right now in London. Julia has already mentioned all the permitted development, which is going ahead like this. We are building the slums of the future right now by converting existing office buildings - often quite tired and old office buildings - into tiny rabbit-hutch bedrooms that are, frankly, ill-suited to the locations and the types of buildings they are in, and then selling them. These are being sold freehold. Look at the nightmare of trying to unpick failed estate-building projects from 30 or 40 years when you have multiple freeholders in a tower block and you need to knock it down. We are building but we are effectively converting blocks into that situation already without even having to wait 30 years for them to decay.

We know about it in London particularly because of temporary accommodation. We have a huge number of people living in temporary accommodation in this city, almost all of whom are in places that are well below the space standards. At Shelter we deal with families every day who are sharing rooms that are a hell of a lot smaller than the Pocket Living ones and those families with two, three or four children. It is exactly the kind of

situation that Julia [Park] has described where you can just about lie everybody down on a bed or on the floor at the same time, but it means there is no room for a cupboard, no room for a sink or anything. You can basically just about keep people alive like this, but that is all.

The social consequences are extremely damaging. The educational impacts are devastating. The impacts on communities are devastating because people really do not like living next door to a vastly overcrowded slum like that. It has real neighbourhood effects as well. It is not just the people living in it.

We know for a fact that tiny, below-space standards rabbit-hutch homes are one of the key drivers of public opposition to new housebuilding as well. If we want to build more homes, we have to bring the public with us. Converting our existing pipeline into ever smaller and smaller rabbit hutches with ever higher population densities is a really bad way to persuade people that housing development in their neighbourhood is a good thing. The social consequences are extreme and very well known.

Sian Berry AM: I do not know if you can comment on historically how space standards became needed. We all have Orwellian visions of the past of people living in very overcrowded conditions.

Toby Lloyd (Head of Housing Development, Shelter): Absolutely. That is because that is the inevitable logic of the market. The reason why every advanced economy in the world has some regulation on land use, especially in its most successful cities, is precisely because that is the logic of land markets. More and more people will have to pack into smaller and smaller spaces because that is where the economic opportunity is.

The Victorian slums were not an expression of a massive economic disaster; quite the opposite. They were an expression of economic success. That is why people packed into them. That is why the last great slum that was demolished in London was more profitable to own than Mayfair per square foot. The density of poor working people was so high that you could extract more rent in value from a slum in Shoreditch than you could from genteel housing in Mayfair.

That is the logic of markets and that is why, ever since, the state has recognised – originally just for public health reasons and because cholera was such a problem – that it had to intervene in land markets. That is why every country in the world has recognised that you need to put a floor on the market pressure there to prevent perfectly rational actors in the market, be they consumers or developers, being forced by competitive processes to undercut the space to the point where it starts to become genuinely insanitary.

Julia [Park] is entirely right. It is not developers pushing this. Unfortunately, they are pushed by competition. Developers need to know what the basic floor is because they have to price in their expectations when they bid for land. A developer such as Pocket Living thinks, “We have space standards. We would not dream of breaching those. We will bid for the land on the basis of those space standards that we expect to be there in five or ten years’ time”, because this is a long-term business. It takes a long time to do these deals in a complex urban development market. If you know that someone else out there is going to undercut you and think, “I will just trim a bit of the space standards and drive more profit”, then you will be forced to as well.

Tom Copley AM (Deputy Chair in the Chair): We are going to come on to the issue of viability and land prices later and so I do not want to stray too much into that now, but we will definitely come back to that point.

Sian Berry AM: Can I put that question to Nick as well about the social impacts for people moving into Pocket Living's homes? You have told us that 90% are single people. What about the ages of them? How are the people who are moving into your homes?

Nick Cuff (Land Director, Pocket Living): The average age is about 32 at the moment, although, interestingly, in our Cricklewood development we did see a number of individuals in their late 40s buying the homes. The demography is changing. It is getting greyer because of living cost issues in London more generally. The target is people who have been renting for five to seven years, who have built up some deposit and who are looking [for properties] to act as a housing ladder either through us or through shared ownership.

Sian Berry AM: You do not have that many homes in London yet, but have you started to experience people reaching the next stage of their lives? Are people living in your homes with children yet?

Nick Cuff (Land Director, Pocket Living): I believe we have one or two units where there are new-borns in them. As a general rule, they are not appropriate for families. We certainly check with the eligibility criteria that we use that they are for singles and sometimes couples. The logic is, though, of course, if you do have a family, you will move out and buy a larger property further out of London, potentially, or in another part of London that is less expensive and take the money you have accrued from buying a home in central London to somewhere perhaps where there is a larger space. It is certainly not encouraged, but we cannot regulate the property for the whole life it is used. We just ensure that what we do deliver is a high-quality, well-designed property.

Leonie Cooper AM: Is there a problem with that, though? I have spoken to people who live in some of the shared ownership blocks, for example, that are either overlooking Battersea Park or near the river in the London Borough of Wandsworth. They have moved in sometimes as single people and sometimes as couples and have started their families. Then they have got to the point where they definitely feel overcrowded and they want to move but they want to stay in the area because they like the schools, they like their commute to work and they do not want to move from wherever it is - and I have chosen Wandsworth because that is in my constituency - to Croydon or Barking and Dagenham, as has been suggested as being areas where prices are lower that they could potentially move to.

I know that you are talking about filling a market need there, but are we still creating the overcrowding of the future? I would like to ask that first to you [Nick Cuff] and then perhaps Toby [Lloyd] could comment on that as well.

Nick Cuff (Land Director, Pocket Living): It is a bit of a red herring because that applies to all sorts of properties in the London market. The built stock that is existing is probably far more of a problem than the very limited new build stock that is generated. There are plenty of examples of converted flats in Victorian properties that are deeply compromised. Likewise, there are quite a few new-builds that are wrapped around stair-cores and have not really made the most of the space.

All we can try to achieve is a well-designed, high-quality home that, using our design principles, can be used for various activities and designs. We cannot regulate how people choose to live their lives in five or ten years' time but we can make sure that what we design is quality and built for the longer term.

Tom Copley AM (Deputy Chair in the Chair): I just wanted to raise this whole issue of choice because, of course, people talk about choice in housing and, just like people talk about choosing tenure, for most people tenure is not a choice. For a lot of people, the size of the property they live in is probably not a choice. You

say, "People could choose to live in smaller properties", but it is not a genuine choice that they face. They are probably going to be forced into smaller properties if smaller properties are built.

I was thinking back to the point that Adam [Challis] made about priorities. It might be that space standards are further down the list, but it does not mean that they are not important to people. Would you say that that was right, Toby?

Toby Lloyd (Head of Housing Development, Shelter): Yes, we know that very clearly. One of the many problems we have with the consumer market for housing in this country is that consumers are very poorly informed before they make choices and as they make choices about which housing they buy or rent. Famously, you get very little time to make decisions. People, the evidence suggests, make decisions based on, as Adam [Challis] suggested, locational factors primarily and they imagine that things will be OK.

What we know from the much more in-depth surveys, particularly the ones that RIBA has led, on people who live in new-build housing is that the number one concern they all have is the space because it looked great and they thought, "That is a bit compact but we will be fine", but once they have lived in it for a few months, they find that it is proving really difficult for them. People end up storing their vacuum cleaners in the boots of their cars and having to keep their food in the toilet because there just is not the storage space. Not all new-build homes are as well designed as others. Some of them are extremely small and poorly designed and storage space is an easy thing to trim away. How many people really think of that when they are looking around a shiny new flat?

Unfortunately, people do have choices but they do not always exercise them as well as they might and they often come to regret them. With housing, it is not like, "Oh, dear. I have bought the wrong pair of shoes. I will get a different one". Once you have moved into a home, your choices are extremely limited for moving on, especially when the housing market is as tight as it is and prices are rising as fast as they are. A lot of people find themselves stuck in that first home that they thought was a foot on the ladder to other things and find that it is actually the only thing they will ever be able to afford.

Shaun Bailey AM: I just want to go back to these space standards and the social impacts. I have spent large parts of my life homeless, sofa-surfing and all of that kind of stuff. Your analysis seemed to be nice home versus not-so-nice home, but for many - particularly young - Londoners it is no home versus small home. I would have a small home versus no home at all.

There is also the thing of many Londoners -- I work with a lot of young people and they all rent bedrooms. If they thought they could rent something that was slightly larger for similar money, maybe more, maybe they would be interested in it. It goes to the Pocket end of things with the design standards. Surely a purpose-designed smaller place for young people who are, hopefully, going to move on would be better than no place at all.

Toby Lloyd (Head of Housing Development, Shelter): Of course, anywhere is better than no place at all. That is a slightly false comparison to use.

Shaun Bailey AM: The comparison you made did not seem to factor that in.

Toby Lloyd (Head of Housing Development, Shelter): We help millions of people every year. We are dealing with the very sharp end of homelessness. Of course, that is our primary concern. We also know full well that we do not help those people ultimately by building worse and worse places that more and more

people will be squeezed into. We know that the single-biggest driver of homelessness is loss of a private-rented tenancy. The next biggest driver, which is usually related, is sofa-surfing coming to an end because people can no longer accommodate them anymore. We have an urgent problem to deal with the needs of people for decently priced accommodation.

My point is simply that by making homes smaller, you do not make them cheaper. You simply make them smaller.

Just look at what has happened. For the last 30 years in this country, particularly in this city, homes have been getting smaller and smaller, until the space standards put a floor on them. In that time, what has happened to house prices? It does not work as a mechanism for making housing more affordable for people. It just means that you pay more for less.

Shaun Bailey AM: There are other things. The ultimate thing is, we are trapped in London with two inexorable things. One: we have no extra space and we cannot magic up land and we are stuck there. Two: we are continuing to attract people. What do we do?

Toby Lloyd (Head of Housing Development, Shelter): I would accept that density is an issue and London has huge amounts of potential for increasing its density, but the way you increase density is partly through smart design, partly through using land better - and there is still an awful lot we could talk about on the way in which land is used in this city - and it is also about height and the density of buildings. The population density per room, which is what we are effectively talking about here, is not the way to get more people into London.

Shaun Bailey AM: I felt it was different, but there you go. Thank you.

Tom Copley AM (Deputy Chair in the Chair): Am I right in saying that we have in Britain the smallest homes in Europe on average?

Toby Lloyd (Head of Housing Development, Shelter): Yes, we are the only country in Europe that is building smaller homes now than we were 20 years ago.

Tom Copley AM (Deputy Chair in the Chair): Thank you.

Tony Devenish AM: I will try to be a bit more positive. We have been quite negative so far in the discussion.

First of all, I would like to say, Nick, you are actually building homes and so congratulations to your business. Have you used exemplary design to ensure you can deliver liveable homes and can you give examples, please?

Nick Cuff (Land Director, Pocket Living): Yes, of course. The Pocket philosophy is that we try to avoid compromises. When we are talking about our 38-square-metre units, they are not full of compromises. You do not press a button and a bed comes down or silly gadgets like that. It is a proper one-bedroom flat. It has its own bedroom, bathroom, etc.

We look at the space and we ask if it can accommodate different uses. Our flats have 12 different lighting systems within them, for example, so that people can use them for different things in the night, in the day, etc. They feel like they have choice. They have very generous fenestration to allow lots of daylight sunlight into the flats. It gives the appearance of more space than there perhaps might otherwise be.

We asked questions of ourselves about whether our spaces create awkward relationships. This is a point to Toby [Lloyd] in terms of office-to-residential conversions and some of the problems with those types of dwellings. We always design our flats so that the door is in the middle of the flat so that there is a good wall-to-floor ratio. People can choose where they put their tables, their chairs, their TVs and their bookshelves. There are choices that they can make about how they fit out their own flats. That is very important for liveability. You feel like you have space to play with.

Then we make sure that they are comfortable. They have storage within the flats with two built-in storage spaces and many of our schemes have lockers outside as well for additional storage that they may well have. We ensure that, as a result, it is a quality product.

The final thing is that we have two typologies but a one-bedroom, one-person flat and these two typologies do not change. We do not bend them out of shape because, if we bend them out of shape, we lose the quality of the thinking that has gone into them. That is when you start having problems when you cannot make choices about how you lay out your flat when you move in and then they become far less liveable for the end user. It is thinking about baking in good design early on so that the people who are lucky enough to buy one of our homes enjoy them and can really feel like they have a home that they can value.

Tony Devenish AM: When some of the people in the room have made the fallacious argument that your houses are not any good because you put too many people in them, it is a bit like saying that in my Knightsbridge and Belgravia ward, if you have a four-bedroom house and you put the whole Saudi royal family in there, you would get overcrowding. It is the same principle. It is the product and how many people. Yours is a single unit, effectively.

Nick Cuff (Land Director, Pocket Living): It is. It fulfils a niche in the market and it fulfils a housing need. There are plenty of other housing needs, clearly, in the market, but I would argue overall that the social benefit of allowing London's starter market a place that they can buy and live in at 100% of the equity, not a share, is vital for the city. That is why we are very committed at Pocket to growing the business sustainably over the next few years and trying to get more of these homes into production.

Tony Devenish AM: Do you take private outside space standards into account as well?

Nick Cuff (Land Director, Pocket Living): Yes, we do. We have some quite innovative thinking around that. We try to pool our community space. Because of the demographics, it is a very narrowly defined part of the market but it is a huge quantum of people who would be eligible for our homes, probably about 1.5 million in total. We know that they are people who are of a certain age and journey in life and so we try to communalise our spaces. We have roof gardens and we have community spaces. We find they are very well used --

Tom Copley AM (Deputy Chair in the Chair): We are going on to outdoor space in the next question and so I do not want us to stray too far into that.

David Kurten AM: I was going to ask about outdoor space. First of all, I would like to ask Julia. Do you think that there has been any downward pressure on the provision of outdoor spaces and open spaces with the move to create ever-smaller homes?

Julia Park (Interim Chair, Housing Group, Royal Institute of British Architects): There is downward pressure on everything. It is getting harder and harder to fit in the bikes, the bins, the lifts, the service rises,

the outdoor space and the play areas. As architects, we do our best. We are increasingly having to use rooftop space, for example, for amenity and that can work very well. It suits some tenures better than others.

However, that is inevitable. We have a duty to build as many good homes as we reasonably can in a city like London, which clearly needs them so badly. We are up for the challenge of rising density, but there comes a point - and, again, it is not science but it is more than art; I cannot exactly put my finger on where that point comes - when things start to work not very well and with neighbours perhaps there is tension because there is not enough space for children to play. You shave the gardens a bit too much and so overlooking becomes an issue. Overheating becomes more of an issue. You do reach a point where liveability is compromised. You just need to be very careful not to go too far beyond that point.

David Kurten AM: Do you have any specific examples of places where people have done it well and there has been good practice been put into place that you can think of?

Julia Park (Interim Chair, Housing Group, Royal Institute of British Architects): Absolutely and - obviously, I would say this - every home should be well designed. The minimum space standards are predicated on good design and efficient space-planning. They do not assume someone will mess up; they assume someone will do it well and Pocket does it extremely well. There is no sloppy space in there just in case you have a bad architect or no architect that wastes it by designing a silly-shaped room. They do expect good design, as we all should. Any home we build today should last 100 years. That should really focus the mind on what we build.

If I may, I would like to come back very quickly on the thing about overcrowding. I completely agree that any home can be potentially overcrowded. A small home gets overcrowded more quickly and any additional person is overcrowding, if you like, but the principle is exactly right. We cannot start to police how many people live in a home, although we have the Overcrowding Act [Housing Act 1985, Part X] to prevent extremes. That is not a direct criticism of small homes.

The other thing I would like to say is that the supplementary planning guidance (SPG) has this woolly clause about "exemplary" design or sometimes "innovative" design - the words are interchangeable - that could be a reason for allowing space standards to be reduced. I do not really buy that argument. We need to know what is meant by "exemplary" or "innovative" design, if that is the case. As I said, the minimum standards are predicated on efficient design anyway. If it is something external, if it is a particularly beautiful building, it still does not make your home any bigger. It might make you more likely to buy it, but there are not really many other attributes - in fact, there are not any other attributes - that compensate directly for not having enough space. I struggle with that loophole, if you like, as a principle.

David Kurten AM: You have anticipated the next question I was going to ask, which is about exemplary design and how sometimes people can get around that by talking about exceptional conditions. You have mentioned that.

How can the Mayor perhaps ensure that that rule is upheld? It is subjective with this idea that exemplary design can then allow people to build something below the minimum space. Is there anything the Mayor could do to ensure that exemplary design is perceived in the same way across the board or that this loophole is not used to reduce space?

Julia Park (Interim Chair, Housing Group, Royal Institute of British Architects): We need exemplary design anyway. I do not see that as a bargaining tool for reducing space. The Mayor clearly has limited

powers anyway because the remit of planning generally is not within the home, particularly now that accessibility has moved to regulation. Space standards are the only internal aspect of the home that is assessed through planning rather than regulation. In encouraging exemplary design through a planning process, you would be talking about more external features. I doubt whether a big communal garden might be a reason to reduce indoor space within a dwelling. You do different things in different types of space.

David Kurten AM: Yes. There should always be exemplary design. That is the message you are giving, absolutely.

Julia Park (Interim Chair, Housing Group, Royal Institute of British Architects): Yes, but it is even more important when you go small. The less space you have to play with the cleverer you have to be with it. Pocket do brilliantly.

Toby Lloyd (Head of Housing Development, Shelter): Can I just come in on outside space? Even if you decide that in theory it is acceptable to have a smaller space standard if you have great outdoor space, for example, no one is going to build that. No one pushing for much smaller homes is going to say, "We will just give away all of that space to a large outdoor garden". It is not a trade-off that the market will ever offer, even if we are to accept it in principle.

Adam Challis (Head of Residential Research, Jones Lang LaSalle): There is a fair point there, but it is probably taking quite a binary view. Julia [Park] mentioned earlier the more effective use of rooftop space as an example, which replicates that outside space but of course maintains at least within the building envelope the requirement so that it is not de-densifying the site and ruining the viability.

There is also a broader discussion here around some of the communal spaces that are coming through. I am thinking notably about the build-to-rent and of course we have the SPG out at the moment looking at the "build-to-rent" definition and looking at how that particular product, which is subsequent to the adoption of the space standards or at least the proposed definition, fits within the context of this conversation about space standards. In this case, I am thinking about the communalisation of space such as dining rooms, gyms, crèches or open space within buildings - and rooftop gardens fit into the context of that conversation - where in fact you can reduce, specifically in a purpose-build private-rented product, the space within units while not in effect collapsing the overall envelope of built area while providing through communal space quite a high-quality alternative that would end up being shared as opposed to privatised. There is a different product out there.

Certainly I would not suggest that there is a reduction of space standards across the board that needs to be considered, but we do have to recognise that London's demography is changing. Nick's [Cuff] statistics about the 90% demand profile for one-beds is a good anecdote or a good example of exactly that point. If we are not adjusting the product to reflect the changing demography of London and the changing need in the context of race-away prices, as Toby [Lloyd] rightly points out, whether it is for rent or for ownership, we are missing a trick here. If that trick as a by-product means that we are pricing in more Londoners into home ownership - and Shaun's [Bailey] point was a very important one - whether it is home ownership or for smaller product rental, then that has to be something that at least is worth consideration and has merit for further consideration.

David Kurten AM: If I can bring Nick in as well. What provisions do you make in Pocket Living for provision of outdoor space or outside space?

Nick Cuff (Land Director, Pocket Living): We do not provide any car-parking in our schemes because we do not believe it is useful and our buyers generally either use their feet, cycle or use public transport. It does not drive values, by the way, for us. Other developers will use that as a premium on their pricing, but for us it has no value.

We are lucky in that sense. We use rooftop gardens. We have allotments. Where the space for car-parks would have been would be our amenity space will probably reside. The result is that they can be very successful. To give you an anecdotal example, three of our buildings' community areas were used for the Queen's Diamond Jubilee parties a few years ago. We know that they work and they are well-used. Our model allows us to take advantage of the space a little bit more effectively because of the fact that we are not using car-parking and other associated things.

Tom Copley AM (Deputy Chair in the Chair): Can I ask how many or what proportion of your homes meet the Lifetime Homes Standard?

Nick Cuff (Land Director, Pocket Living): They all do.

Tom Copley AM (Deputy Chair in the Chair): Does a smaller size mean that accessibility is reduced at all?

Nick Cuff (Land Director, Pocket Living): No. We think very carefully about that. They all have to meet the minimum standards set by the Lifetime Homes Standard, yes.

Shaun Bailey AM: Just to go back to design because design is very subjective and just two maybe naïve questions because architecture always strikes me as quite complicated. Are you saying that with the minimum space standards now, if you go below them, it is hard to do anything socially useful? Are you saying that they are set at a level that makes the chances of delivering something architecturally useful higher?

Julia Park (Interim Chair, Housing Group, Royal Institute of British Architects): I am not sure about the link to architecture. You could still produce a beautiful building externally with ridiculously small flats that are badly planned. We do not design the outside separately from the inside, if you see what I mean, but it would not affect all aspects of the architecture.

Shaun Bailey AM: I am much more interested in the inside. If you go below the current size, are you saying that designing a flat that will be liveable, useful and life-affirming would be significantly harder or would it just be a different challenge?

Julia Park (Interim Chair, Housing Group, Royal Institute of British Architects): There is a very good reason and methodology and a lot of time and effort went into devising the minimum space standards that we have now. That was 2010. More recently, as I said, the Government went through the same exercise and came up with more or less the same answer. All that has changed since then is not our lifestyles. It is too short a period. What has changed is that we have failed to build anywhere the number of homes that we need and so the pressure on housing has increased. The whole housing situation has worsened but the reasons for needing that much space to live a decent life have not changed.

Sometimes catastrophes force us to make compromises. War is a good example. You do not start grumbling about the sorts of things you grumble about in peacetime when your country is at war. You knuckle down, you get on, you invite another family in to live with you and you manage. I am not quite sure where I am going with this, but I think you know what I mean. I was thinking the other day that if I could not afford any

clothes, would I go to work in a blanket? I would because, otherwise, I would be naked and that would be worse.

What I am trying to say is that the drivers behind all of that work, the reasons for starting it in the first place, the discussion that took place and the work that took place around the kind of furniture that needs to be accommodated -- and everyone knows that that is generic but, nonetheless, could you share a chest of drawers 750 millimetres wide with your partner? That is all you get under the current space standards.

Shaun Bailey AM: I see your point. It is about need versus what we want. I would like a seven-bedroom home on an acre of land and that is not going to happen.

Julia Park (Interim Chair, Housing Group, Royal Institute of British Architects): Absolutely. Most of us would like --

Shaun Bailey AM: I get that, but my point is that in that discussion - I see where it is going and that is fine - but I have to weigh it up. I come from a group of people and convene a lot with a group of people who have nothing. Their take on all of this would be that they would much prefer something and that is a big step for them. Much of the conversation we are having about size for them would be considered a first-world problem.

Julia Park (Interim Chair, Housing Group, Royal Institute of British Architects): I do get that.

Shaun Bailey AM: I have just one last particular thing. Would it be possible to capture in architectural terms what is considered "good design"? It is very subjective. I liken it to the law. The law defines many very complex concepts. Would it be possible to do that?

Where I am going with this is that I see this floor that we are all talking about and it is accepted. If we went below that, certain people would panic, but would we be able to go below that and specify what would be acceptable and anything outside of that would not be?

Julia Park (Interim Chair, Housing Group, Royal Institute of British Architects): The London Housing Design Guide has had a jolly good go at deciding what "good design" means. When it comes to housing - when it comes to most things - it is not one thing but is many things. You have to keep lots of balls in the air. Most of those things are not tradeable. For example, if the soundproofing in your home is very good, it does not help you with space. It helps you to have a nice private life, but these things do not compensate for each other. They accumulate. You cannot afford to drop the ball on any of them because you still have a problem.

Shaun Bailey AM: That was what I wanted to know. As a non-architect, I am just trying to see if you can capture what is "good" and try to preserve that. You are saying it is not relevant?

Julia Park (Interim Chair, Housing Group, Royal Institute of British Architects): We try, but it will not be a short sentence.

Shaun Bailey AM: Thank you.

Julia Park (Interim Chair, Housing Group, Royal Institute of British Architects): Can I just mention one other thing? We talk about space standards as more of a stick, really, something to beat you with if you look like you are going too small, but they can be a real positive force for good.

It may sound strange, but one of the huge benefits of having a space standard is that it has the potential to reduce under-occupancy. We have 26 million unused bedrooms in this country. We actually have enough homes for every household. We have enough bedrooms to have one each. We do not even need to share with our partners. I do not think London has quite those same statistics; they are national statistics.

One of the reasons for this dreadful imbalance and this shocking level of under-occupancy - which has doubled in the last ten years - is because lots of homes have been built with bedrooms that are not very usable and do not have enough storage. Some people need to under-occupy just to be comfortable and they end up with more space than they need because of the way it is configured and at least one of their spare bedrooms is their storage.

That is by no means the only reason. Of course we all like to have a spare bedroom and most of us would like to have as much space as we can afford or we think we would. In fact, we would probably find it more than we could manage if we took it to an extreme. However, there is a point that what space standards do is to calibrate the space to suit different types of households. Within the home, they try not to interfere too much, but they do protect things like bedroom size and storage so that the balance of the space is up for grabs but in those rooms that tend to be squeezed otherwise - a home with three bedrooms will always sell for more than a home with two bedrooms, whatever size the bedrooms are; it is just a quirk of the way we value things - it goes a long way to addressing that and in particular in encouraging downsizing. One of the main reasons why older people are reluctant to downsize - and, again, it is by no means the only reason - is that it is very hard to find a small home with bigish rooms, particularly usable bedrooms, particularly bedrooms that you could use as a wheelchair user if push came to shove, and again with storage.

Therefore, space standards do not necessarily make homes bigger, particularly if your demographic is moving towards smaller households. What space standards should do - and it is hard to prove - is to help us fit our homes better or our homes fit us better.

Toby Lloyd (Head of Housing Development, Shelter): Can I just add one little point to that? These are points that are very well made and entirely true. They become even more important when we are talking about building at densities. The greater the density and the higher the rise of the buildings, the more important it becomes that that internal space is well designed and spacious. What might be a slightly cramped but manageable bungalow with a garden is a really unliveable flat on the fourteenth floor.

Tom Copley AM (Deputy Chair in the Chair): It is the Danny Dorling [British social geographer] argument that we have come on to here, which is the idea that we do not really need to be building that many more new homes but we just need to make more efficient use of the existing stock.

The need-versus-want question that Shaun [Bailey AM] touched on is an interesting one because of course, in the interwar period and indeed in the post-war period of mass council housebuilding, it was agreed and there was a consensus that was arrived at for the amount of space that people needed. That is why, with council housing, the flats tend to be big.

Toby, you have done some work at Shelter recently. Was it about a rental standard? It was about arriving at a consensus about what people need out of their homes and I think space came into that.

Toby Lloyd (Head of Housing Development, Shelter): Absolutely. I apologise that I do not have the figures in front of me. The Living Home Standard is a crowdsourced standard. It is not that people like me have gone away and decided what people should want. This is what the British people, whom we consulted in

huge numbers, felt was a basic, decent minimum for a home to be adequate. We are recognising that there are of course choices and trade-offs about location and all the rest of it and it was a complex thing to do, but the message came out of that very clearly that a decent amount of space is one of the main reasons - from memory, in London particularly it was second only to affordability - why homes failed the people's instinctive sense of what a home should be.

Tony Devenish AM: Nick, are smaller homes quicker and cheaper to build than other traditional builds?

Nick Cuff (Land Director, Pocket Living): That requires a slightly complex answer, I am afraid, Tony. Interestingly, small homes are more expensive to build on a pounds-per-square-foot basis. The reason for that is because there are more kitchens and more bathrooms per floorplate and, therefore, there is more complexity and the cost per square foot is quite a lot higher than a standard housebuilder pounds-per-square-foot cost by probably about 15% in total.

What is interesting about our model - and it does not necessarily follow that everyone will benefit from this - is that because we only, as I said earlier, have two typologies and we are religious about making sure that those typologies are not compromised in our schemes, there is the advantage economically of repetition. Repetition means that we can look at different kinds of procurement model than a traditional developer, such as modular, such as going into a factory, designing the unit in a factory and potentially using mass-production techniques to engineer the unit on the factory floor and then assemble them onsite at much greater speed. By the way, the costs in the factory do not differ from traditional construction, but the speed and the time saving, which can be quite significant, probably in some cases around a third of construction time, are significant from a cost-of-capital point of view.

Therefore, to answer your question, it is yes to the first part if you have the right site that allows you to do modular, but it is no to the second part because the density generates costs in itself.

Tony Devenish AM: Maybe you would like to write to Nicky [Gavron AM] on modular particularly because I know she is gathering evidence for her study on modular.

Nick Cuff (Land Director, Pocket Living): Yes.

Tony Devenish AM: Any specifics would be really helpful to her and the Committee, please. Julia, could you comment on that, too, please?

Julia Park (Interim Chair, Housing Group, Royal Institute of British Architects): Yes. It is perfectly possible to build larger homes in a modular way as well. You just need more modules. The key is standardisation, as you said, Nick. I guess that is a pro and a con of what Pocket does and what the Private Rented Sector (PRS) is typically doing. They tend to be quite large concentrations of one or two dwelling types that therefore suit a particular demographic. That is fine sprinkled in amongst Victorian family houses and London's rich mix of other types of housing, but on larger developments particularly we try to do a very wide range of dwelling types across all tenures, too. That, again, is perfectly possible with modular but the number of different modules, as you can imagine, will multiply to the point where you lose the cost benefit.

However, that is absolutely right. The kitchens and the bathrooms are the expensive bits, the bits with services, and so it is cheaper in that sense per square metre to build a bigger home. It is also much cheaper by square metre to buy a bigger home. The smallest homes are the most expensive by square metre.

Tom Copley AM (Deputy Chair in the Chair): Nick, could you tell us, when you use modular construction, how much time that takes off the build time?

Nick Cuff (Land Director, Pocket Living): I will give you a live example. We have just completed a scheme in Streatham of 36 homes within quite a tight urban environment in a council estate environment where we acquired a small vacant car-parking garage site. The 36 homes took us 10 months to build and would have probably taken us 20 months or maybe 15 to 16 months --

Tom Copley AM (Deputy Chair in the Chair): You are not including planning in the build time?

Nick Cuff (Land Director, Pocket Living): Yes, excluding planning, just the actual construction time. On average, for one of our schemes, it probably takes roughly 20 months traditionally. It might take 12 months to build it on a modular basis and so there is a real saving there. From a unit-number point of view and a demand point of view, it is great because you can get the units out to the public quicker.

Leonie Cooper AM: Thank you very much. I probably was not expressing what I was trying to say earlier on very clearly because Tony [Devenish AM] obviously misunderstood me, but Julia [Park] has just touched on it a bit. It was about the concept of building small in a large quantity across the whole of a site. With viability assessments, there is a tendency to end up with looking at more of the smaller dwellings if there is an issue about the land price.

Do you think that that is true and do you think that building smaller has a perverse incentive in a way and it actually increases the land price in some way? I would like to ask Toby first and then Adam [Challis].

Toby Lloyd (Head of Housing Development, Shelter): The short answer is yes. The land price mechanism is the key determinant of what gets built, especially in a constrained urban environment like London where there are not vast amounts of different land that we can just build on instead.

When you have already paid for a piece of land and the price that you have paid is fixed, you will always be able to get more profit or more viability out of it if you can cut corners and raise the price of what you sell. That is just fundamental. Therefore, there is always an incentive for the current holders of land to somehow cut the cost - whether it is the affordable housing contributions or the infrastructure contributions or the cost of construction or the cost of decent design - and to squeeze as much value out of it as possible. That is entirely sensible and right. That is just business doing what it is meant to do.

The problem comes when those expectations are then priced into the next site because, in a competitive land market, the developer that estimates that they can squeeze a bit more off the costs will be the one that can offer the landowner more and get the site for more. The fundamental problem here is that people seem to assume that if you make homes smaller it will make them cheaper. It does not. All it means is that the landowner can extract more value from the development process through this mechanism. In the very short term, you can always say, "You have bought your site and you have planning permission under these conditions". If we give you an exemption on this - and you can cut the space standards or cut the affordable housing or any of the other things that are a cost to the developer- then, sure, you could improve the viability on that one site in the short term, but the market is extremely efficient in this regard and it will price in that reduction to the next site and the one after that and the one after that.

That mechanism is why you need to have a consistent floor on space standards. Otherwise, the developer makes an expectation, "I reckon I can get out of these". It is not even just having the space standards. It is

sending a very clear signal that you will not reopen them every five years. That sends a really disastrous signal to the market that, "These things are at best temporary and you can probably wriggle out of them". It only takes one developer to be up against, say, Pocket, which is assiduously planning with good design and space standards in mind, to think, "I reckon I can squeeze some really tiny hutches on here and really rinse the land value". They will outbid Pocket for the next site. Then the only thing that will be viable is that particularly grotty rabbit-hutch scheme because that is the one that extracts the most value. The point of the system is partly to ensure that the market can work in a consistent and effective way rather than just ensuring that the next landowner is able to extract more value.

I would ask, therefore, who is pushing this? The developers are not. Pocket is not because it works very well within the existing system, which, as Julia [Park] said, was really exhaustively crawled over not very many years ago at all. Lots of land has been bought on the basis of those space standards. Once you start tearing them up and sending the signal to the market that they can always be torn up again, all you will be doing is inflating land values even further in London and the last thing London needs is higher residential land values. We are supposed to be making housing more affordable and more of it, not increasing the price while simultaneously shrinking the quality. That would be a thoroughly perverse outcome.

Berkeley Homes, the leading developer in London, not only welcomed space standards but voluntarily and uniquely extended them to its entire output across the country because it can see the value of this. Why would you want to undercut the good work of good developers who are trying to do the right thing here by offering a competitive advantage to those who are prepared to squeeze the system?

Adam Challis (Head of Residential Research, Jones Lang LaSalle): Toby [Lloyd] has provided a fair reflection on much of how the land market works, but I would argue that it is not quite as simple as that.

As we have heard from Nick [Cuff], smaller homes are not cheaper to build. In fact, they are possibly 10% to 15% more expensive and so, clearly, that has a repercussion in terms of gross profit, as it were, which is ultimately what will determine the land value and so there is an erosion there.

Ultimately, the impact of a greater proportion of smaller homes in a scheme has a lot more to do in London with the saleability. For example, three-bedroom units, because they are not sold on pound-per-square-foot terms but are sold on capital-value terms, start to rub up against higher stamp duty and higher affordability challenges. If you can sell more homes quicker - and that tends to be at the moment smaller homes - that has a much stronger impact on viability. The end result that Toby [Lloyd] described is the same. There is a bit more complexity there around the mix and the proportion of smaller homes.

Of course, ultimately, if what we are trying to do and if what the Mayor is trying to do is to move towards the 50,000-plus homes target - and in reality we will go lower this year rather than higher, unfortunately, in terms of starts - I would suggest that there is the opportunity to think about an adjusted mix and to think about a commensurate adjustment if need be to hold back land value movement and an adjustment around the affordable quantum. That would be an important mechanism perhaps to keep in check land values. Toby is absolutely right that excessive land value is unhelpful to everyone and consistency in that space would be of value.

There is a much greater complexity around land values than simply around smaller homes and density driving more profit. It certainly could drive more homes. Profit is a bigger and broader question that takes into account a number of other factors. We are talking about it in a for-sale sense and we can come on to the impact when we are considering a build-to-rent scheme or a purpose-built rented scheme. Again, if build costs

are increasing on a per-square-foot basis by 10% to 15% but let us say for argument's sake we are talking about a reduction in the average size of that home by a commensurate amount, your zero-sum is broadly the same. If, however, you have the opportunity to increase the number of units within a given envelope because you have not seen build costs escalate to that level, what you are not doing is not changing the viability equation at all but you are getting more homes within a given envelope of a building.

While we are not trying to - and I certainly would not - argue that this is a conversation that is a panacea for all challenges in terms of London's housing crisis, certainly some segments and, clearly, the smaller household segment is an area where this conversation deserves a lot more attention and in fact where new-build typically can be of greatest help.

Leonie Cooper AM: It strikes me from what you are saying then is - and this is something that Julia [Park] just commented on - that you need to have that mix of units partly because you will be meeting a variety of need, which was the point that I was clumsily making earlier on, and also partly because it will address some of the potential issues to do with over-densification - if there is such a word - and the impact then on land prices, which then impacts on what Pocket is doing because, if everyone becomes Pocket, as it were, or whatever size -- Pocket works very well on the smaller sites and if you are complementing what others are doing and if there is a range of what others are doing. Would that be fair to say? What we need is that range rather than everybody rushing to become a Pocket?

Nick Cuff (Land Director, Pocket Living): That is a very good summary, Leonie. It is a perfect solution for some small sites in London and it can make small sites that are not delivering or are just sitting vacant viable for development. Let us not forget that one of the problems London housing at the moment is too much housing in terms of supply is concentrated in too few very large sites. As a capital, 10% of our identified housing is on three sites and will take 30 or 40 years to deliver. Although the 10% is identified, it is notional as to when and how it will come to the market. Therefore, small sites have a huge role to play and high density can be one part of unlocking those smaller sites and smaller developers to do those sites in London. That is the business model that Pocket has. It has a key role but it is not the only role.

Leonie Cooper AM: My feeling is that we need to resist the move to making all the sites just for the smaller units. We did try that and it did not work out very well in the early 1990s. We ended up with the Government introducing the housing market package and we ended up with this huge overhang of much smaller properties having been developed that then became unsaleable by developers. I can see lots of nodding going on from the guests. Do you think it is a fair point that that range is very important so that the Pockets are developing on the smaller sites, but we get the range on those larger sites?

Adam Challis (Head of Residential Research, Jones Lang LaSalle): My view is that you are absolutely right. One of the fundamental tenets of our planning system is balanced and mixed communities and that, of course, is reflected in that mix range you are referring to. Particularly on large sites, that range makes sense where there is a critical mass and an opportunity to be able to provide a bit more balance. Of course, we see that today in virtually all of our large schemes.

The contrast is the smaller infill sites where, in fact, to make them viable -- and of course there are a whole range of broader challenges that small developers have at the moment in terms of cost of capital and in terms of being able to access the market. Frankly, if we can do a little bit more to help them out and in fact maybe there is an opportunity there to be a little more relaxed on the mix for smaller sites, it will allow a few more small developers like Pocket to join small or medium-sized and perhaps scale up to be several hundred units or 1,000 units per annum and be a genuine complement across a range of smaller sites. That is a perfectly

reasonable compromise, if I could use that word, in order to get more homes built. Otherwise, those sites languish or they are harder to deliver full stop and 100% of nothing is not terribly helpful.

Toby Lloyd (Head of Housing Development, Shelter): That is precisely the system we currently have. We have a relatively small floor on the space standards, which, as Julia [Park] and Adam [Challis] have both said, is designed - actually largely influenced by Pocket - around exemplary assumptions. It is the assumption that at the bottom end they will be really as well designed as is humanly possible to design a flat that small.

Even within that, there are still exceptions. We still allow exceptions for temporary accommodation and for rented room types of developments, which would answer maybe Shaun's [Bailey AM] point. In fact, we are building quite a lot of homes in London that are below those standards anyway. The idea that somehow the minimum space standards agreed six years ago are somehow a massive block on development just does not stand up in any way.

Leonie Cooper AM: Thank you.

Shaun Bailey AM: What lessons have been learned for smaller homes from other cities in the world? Do other cities build these homes? Have they had good or bad experiences of these? Are there lessons that we can learn if we are to look into this in London?

Adam Challis (Head of Residential Research, Jones Lang LaSalle): Yes, of course there are some important lessons. It is interesting to note that while we have been thinking about holding standards at the level that we have in London, we saw in New York [United States of America] at the same time quite a lot of effort and innovation around what I suppose are crudely called "micro-apartments", which frankly does not sound to me like a very promotive name, but smaller units and what they can mean as a part of the overall complement to delivery. You see in many North American cities now - Los Angeles, Seattle, New York - space standards for smaller units coming in at 220 to 250 square feet.

Of course that in isolation is one conversation but, as I was alluding to earlier, it has to be taken into context with those buildings also offering a range of shared services and amenity that perhaps offsets some of that loss an individual householder might feel if they were occupying simply that unit in isolation without any other amenity to go alongside. We heard earlier from Julia [Park] the most extreme example that I think we all have heard about the 2.2-square-metre unit in Japan, I think it was. Absolutely, there are lessons both good and bad and I am not sure that that is a space that you will want to perhaps explore to any great detail only to exclude, but there is a space for shared and communal services where you can rent quality bedrooms that are a good size, but of course that size would be much smaller than the minimum space standards in order to access some sense of sovereignty over your private space, even if that private space may well be less than the 400-odd square feet that is currently available at the bottom end of the market.

We can learn quite a lot from the slightly broader discussion that I am perhaps framing, which is that this not just about units in isolation. This is about units in the context of the overall offer. We talked about the outside space. We talked about rooftop gardens and other elements that can offset some of what might be considered a loss in terms of private space.

Toby Lloyd (Head of Housing Development, Shelter): One of the neat things about the British housing market compared to particularly our European competitors or neighbours is that British people overwhelmingly prefer older houses to new houses. The vast majority of people looking to buy a house say that they would not even look at a new-build, which is completely unique. In most European countries it is the other way

around and people prefer new homes. The primary reason for that is that the perception, quite rightly, is that new homes are very small. If we want people to exercise market choice and to encourage developers to build better homes and build more of them, we need consumers to want to buy them and we need communities to want to welcome them. The second reason is of course that they are often perceived as ugly. Both really speak to the same mechanism: a necessity on the part of developers to squeeze the costs as much as possible in order to outbid each other for land.

To get out of that vicious circle, we need to be emulating some of the more successful city economies and national economies of Europe. A lot of cities have been really turned around from urban decay over the last 30 years and they have invariably done that by providing a dynamic market environment that requires a basic floor system and gives everyone a level playing field to compete on. Part of that is a really clear and consistent set of space standards.

Shaun Bailey AM: I suppose the obvious question is how other cities have used this tactic in the context of all of their housing need. Who needs what? Are people going to move on? I have a family and so I have a very different need than when I was on my own and I was prepared to live in a slightly different situation. I am prepared to move out [of central London]. I wanted to move out but when I was younger I needed to be here. With those differing needs and the extreme need we have in London, I would argue that our need far outstrips any of our European competitors and is growing. That is my impression.

Toby Lloyd (Head of Housing Development, Shelter): That is entirely true and the reason for that is because, unlike everywhere else in Europe, we have been spectacularly failing to build sufficient numbers, quality or affordability of homes for an awfully long time in this city.

Shaun Bailey AM: Is it because we have one very dominant place - London - that everybody wants to be in, including many of those Europeans?

Adam Challis (Head of Residential Research, Jones Lang LaSalle): To be honest, the supply-and-demand balance is not a London problem. Global gateway cities are all struggling to varying degrees with this issue. Absolutely, without question, London has one of the more pronounced challenges and has a whole range of issues that need to be unpacked around availability of development land and population growth. We have quite a decent net population growth. It is the natural population growth as well as the inward migration that becomes catalysing in terms of demand against what is - Toby is right - as we all know, an under-provision of homes against that need. The supply-and-demand balance is something that cities around the world are grappling with at the moment. We are becoming ever more urbanised. We all know those statistics.

What we are talking about here is about being able to address that specific need - this is not a panacea across the entire housing market - for what is the strongest growth sector, the smaller households, the individuals, perhaps couples pre-family formation, but certainly at the very entry level of the housing market being able to provide something that is accessible in terms of affordability either for home ownership or for rental and being able to have that broader conversation.

I have referred earlier to some research that we did a couple of years ago that suggested that in London it would break back to pricing in another 145,000 households. That, for me, is something that is worth at least some consideration in that there are 145,000 more households in London that may have a home that otherwise would be constrained to the PRS. That says to me that there is at least a conversation here worth having. This is not a conversation about having standards or not having them. It is about whether they are set at the right

level and whether there is a wider offer that can offset some of the losses that would be quite real and experienced by those in smaller properties as part of a broader amenity offer in new construction.

Toby Lloyd (Head of Housing Development, Shelter): I am afraid I do reject this assumption that by making them smaller you will make them cheaper and, therefore, price in a whole bunch of people because --

Shaun Bailey AM: Surely, is it not about how you cost them? As a homebuyer, you do not look at the per-square-foot. You are looking at the ultimate price, "Can I pay that or not?" That is the thing.

Toby Lloyd (Head of Housing Development, Shelter): Exactly. If it is smaller, you will end up paying up to the maximum of your budget for a smaller home because that --

Shaun Bailey AM: Let us accept that. I get that space is everything. It is why I no longer live in Ladbroke Grove and now live in the London Borough of Havering. I understand that. However, I still have the tension. When I was younger, I wanted and needed to be here. If you are building these big flats, which are expensive and which I cannot afford in any way, shape or form, you give me no choices.

I am just wondering. Is there a segment of the market that needs something that is small, cheap and quick? At that point in my life, that is what I want, and I will hopefully move on. My career progression is stunted if I cannot afford to stay here, and if we do not provide a mix, something at the lower end - and that is why the space then is important - are you stopping me from ever doing anything important in my life?

Toby Lloyd (Head of Housing Development, Shelter): We are not building loads of big flats. We are building really small flats already.

Shaun Bailey AM: Smaller. Smaller than that. The size is relative.

Toby Lloyd (Head of Housing Development, Shelter): As we have already identified, if you reduce the size, people's budgets remain the same. All you do is inflate the price of small flats, so all you have done is give people less for their money. I cannot see how that is a viable solution. It only works if you assume that by reducing standards somehow you will get lots more homes and they will all be cheaper, but no one is going to build you those. No one is going to build homes and sell them cheaper just because they are a bit smaller. They will sell them for the price they can fetch.

Julia Park (Interim Chair, Housing Group, Royal Institute of British Architects): Unless a public sector body does it.

Shaun Bailey AM: Yes, because you are saying that there is an assumption we have to make, but your analysis has an assumption as well. It could be correct. I am not challenging your assumption. To the layman, it would seem like, if you have a corner of land and you can get more on it, you could sell them for less, and of course you could use the regulations to help it happen.

Toby Lloyd (Head of Housing Development, Shelter): You could, but you do not have to, so why would you? In fact, what you will actually find is that in a competitive market, the developer who thinks that he can get the most for them will be the one who wins that site in the competitive auction for land. Therefore, that saving will not be passed on to the buyer in any way, shape or form. It will simply be capitalised into land values, and we see that happening time and time again.

The only way this argument works is if we assume that homes will be cheaper if they are just worse. By the same extension, maybe draughty homes should be cheaper and homes that are in a really bad state of repair should be cheaper. Should we be actively encouraging homes to be draughty and poorly repaired in order to make them cheaper? We need to make homes in London cheaper urgently, but making them worse is just not the way to do that.

Tom Copley AM (Deputy Chair in the Chair): We have covered the point about the effect on land prices very comprehensively.

Adam, you moved on to the whole area of the private rented sector, and I am interested whether or not perhaps the smaller homes would be better suited to the private rented sector than the home-buying market. Perhaps you can kick us off.

Adam Challis (Head of Residential Research, Jones Lang LaSalle): Perhaps it is a safer space for me to make the comments that I am trying to make because, with a purpose-built private rented product, in the main, we are talking more clearly about a particular demographic, a younger population that is pre-family formation. Some of the points that I am raising --

Tom Copley AM (Deputy Chair in the Chair): Although increasingly not so.

Adam Challis (Head of Residential Research, Jones Lang LaSalle): Increasingly not so, you are absolutely right, but of course that is a product of wider unaffordability as much as a choice product as well. If there is a space - pardon the pun - where we can more aptly consider a pressure on minimum standards, it is for those smaller households in terms of accessibility, in terms of accessing that first stage, whether that is for home ownership or, in this case, for purpose-built rented product. Where this conversation perhaps becomes really interesting and really helpful in terms of solving London's housing challenges is that we are talking about a professionalised management, the critical mass that Julia [Park] referred to earlier in terms of the build envelope, such that you can start to drive some efficiencies in the physical construct of the building in order to provide additional amenities and additional services that, again, start to offset perhaps some of the lost lifestyle amenity of a private space.

Tom Copley AM (Deputy Chair in the Chair): We are going to go on to contributions from Twitter now. When I tweeted we were discussing this earlier, someone said to me, "I quite like my small flat and I would like it more, for example, if I could get rid of my washing machine and there was a laundry room", or something like that. Is that what you are talking about?

Adam Challis (Head of Residential Research, Jones Lang LaSalle): It is a good example, yes. If you have a communal laundry in the basement, sure, that comes out of the room and it makes the experience for everybody who lives around you a little bit nicer and quieter as well.

Tom Copley AM (Deputy Chair in the Chair): Are we not then starting to move into the realm of co-housing, which is of course popular in Denmark, where you have your private space - and the extent of that can vary in terms of what is included depending on the development - and then you have communal space?

Adam Challis (Head of Residential Research, Jones Lang LaSalle): You are moving down the spectrum. Yes, that is on the same spectrum but further along. What I am referring to and what seems to be now gaining quite a lot of popular pressure both within industry and within policy in the UK is reflecting a better balance of what people want within their private space. We do not have the same need for separate dining rooms, for example, which feels a bit of an archaic example now in comparison to what we tend to provide in new-build

terms. Could you have a communal dining room within a building that offers a better standard than you would have had privately? It is a higher-quality space that you use on an occasional rent or shift basis. A rooftop garden gives you views across the city, perhaps, or at least some views, which you might not have had access to or been able to afford if it was a part of your outside balcony space, for example. You can communalise and get greater efficiencies and economies of scale and provide some of these extra amenities and services - like a laundry service, for example, if that was not a physical thing - and that becomes a part of a broader conversation. If we hold back that conversation by saying, "Units need to be of a certain size and, therefore, we cannot look at this broader innovation", we are rowing against where demand is moving but also where affordability is pushing us.

Tom Copley AM (Deputy Chair in the Chair): Toby, would this resolve any of the issues around land prices and things like that? What is your reaction to this model of doing things?

Toby Lloyd (Head of Housing Development, Shelter): You are both talking about very different things. I declare an interest that in a personal capacity I have been part of a co-housing group in the London Borough of Hackney that has tried and failed to get to build a co-housing scheme. Those are about choices and those are about people coming together and designing collective environments for themselves. You mentioned Denmark. Denmark has by far the most generous space standards applied nationally of any country in Europe. It is not a coincidence that that is where co-housing has taken off, partly because that ability to ensure that the homes themselves are of a decent size, and have to be, enables people to operate within the land market more effectively in a very similarly constrained, densely populated country as this one, to be able to acquire sites and build good-quality schemes.

What Adam is referring to is much more the serviced lodging-house model, which, again, there may well be demand for, particularly in those very, very high-pressure central London locations for a particular demographic. Firstly, the system already accommodates those kinds of models. They are being built as we speak, so the idea that we need to remove space standards across the board to enable them is just not true. Secondly, these are extremely niche products. We should not be designing the entire system just to make it slightly easier to build a new kind of lodging house for very, very highly mobile global workers who might particularly want that semi-hotel setup. Fine. The system can provide for that niche. London is a very big city and has a lot of different niches. It is great to allow all of them to flourish, but recognise they are niches and do not design the entire system around prejudicing in favour of them.

Adam Challis (Head of Residential Research, Jones Lang LaSalle): To be honest, if you look at the strongest multi-family market in the United States (US), where multi-family purpose-built products have been around for 30-plus years, it is actually the largest asset class. It is larger than offices, it is larger than retail. It is the largest real estate asset class. It certainly is not niche and, as we all know, the growth in the private rented sector is extraordinary in London and in the UK and so the idea that it is a product that supports a very small subcomponent of the market; in comparison with that US example, where it represents something like 30% of all institutional investment in real estate. That is a statement in and of itself in terms of the scale of the opportunity to flow money into the sector to build the homes we need.

Toby Lloyd (Head of Housing Development, Shelter): We cannot have this both ways, though. We are either claiming that there are some small niche reasons why the already pretty low space standards that we have should be lowered even further for certain niches, or claiming that this will be a huge new market for a vast swathe of the population. It is one or the other. If it is a niche product for a very small number of people, the system already accommodates that. If we are talking about a mass product that we really see the families of the future living in - the multi-family model - then we should not be talking about lowering space

standards. If anything, we should be increasing them if it is really the product that we expect the families of the future to be living in in huge numbers.

Tom Copley AM (Deputy Chair in the Chair): Speaking as a private tenant, I do not particularly want to see a reduction in space standards for private tenants. Given that, as you say, the PRS is moving towards mirroring the owner-occupier sector and will continue to do so, the needs are going to be very similar.

I am interested. Nick, at Pocket, you are delivering private rented homes now as well. You talked about your set designs. Have you varied anything for your PRS properties or is it the same design and the same model?

Nick Cuff (Land Director, Pocket Living): It is a good question. Just to step back, a lot of this debate can be explained around restrictions and exceptions. There is a role for looking at smaller apartment typologies in rental, for instance, if there is a restriction which makes it an in-perpetuity rental product, so it is not used as a home ownership product. There could be something that could be explored.

The exceptions, in which Pocket has developed a niche over the last ten years, are good-quality design and being able to satisfy planning authorities through legal restrictions in section 106 agreements. For example, that design can be achieved to a high quality and their restrictions on pricing and resales can be ways of ensuring that the rubbish that we have seen in the less-restricted areas of the market - I am talking about PDR here, where there has been some real rubbish developed, small flats, poor quality - can be avoided. There is a niche for small flats, restrictions and exceptions.

In the rental market, the Pocket product can be a way of delivering to incomes far below market level. We have a scheme in the London Borough of Camden through King's Cross which essentially is seeing a Pocket component in a larger scheme that will deliver for rents of much bigger discounts than 20% but intermediate incomes and so people on incomes from £25,000 to £66,000 and a good spread between.

Tom Copley AM (Deputy Chair in the Chair): These are intermediate renters?

Nick Cuff (Land Director, Pocket Living): Intermediate rent. The way we have done that is, yes, smaller units.

Tom Copley AM (Deputy Chair in the Chair): Still at the space standards?

Nick Cuff (Land Director, Pocket Living): [Still] at the space standards. The one-bedroom unit. We have also put in a two-bed, two-person sharer unit in there, which is a unit that sits between the one-bed, two-person at 50 square metres and the two-bed, three-person at 61 square metres. It is a 57-square-metre unit. That is a sharer unit, which is restricted in perpetuity as a rental product, and that unit can target household incomes much lower than the market rent within Camden in that area.

Tom Copley AM (Deputy Chair in the Chair): Do you act as a landlord for that?

Nick Cuff (Land Director, Pocket Living): Yes.

Julia Park (Interim Chair, Housing Group, Royal Institute of British Architects): Yes, please, if I may. On micro-homes, they are a specific part of the private rental sector. As I am sure you know, they are below the space standards typically - that is what the name implies - and they get treated as *sui generis* in the planning process, which means we do not have a proper debate. It is bonkers. Class C residential includes

prisons, detention centres, army barracks, hostels, care homes and hotels, all within class C residential. Micro-homes, for some bizarre reason, just get pushed through on the premise of being student housing or something which, for historic reasons, has never been recognised as residential.

We really are having our cake and eating it here and it is quite a scandal. We are calling these things homes, and they are homes for some people, and they are the homes that some people choose. I am thinking of things like The Collective co-living building, where there is a lot of communal space, and for that development - do not quote me on the rent - I believe it is £1,000 or more a month. They are not cheap. It is a lifestyle choice. It is for people who like to be sociable and like to have their laundry and the ironing done for them if they are busy at work and so on.

The point I am trying to make is that I really agree with Nick [Cuff] about having a proper debate, rather than turning a blind eye to these products just by not facing up to a proper planning use class. It means they bypass all standards on accessibility as well.

Tom Copley AM (Deputy Chair in the Chair): Is this class C?

Julia Park (Interim Chair, Housing Group, Royal Institute of British Architects): Class C is residential. Within that, as I say, you have care homes, prisons and detention centres. It is broken down as four subsets.

Sian Berry AM: We talked about this earlier on a little bit, and I had some more questions to do with the risk of future overcrowding. It seems from the discussion we have had that there are basically two things going on here. You have people like Pocket who are designing things from scratch and doing things quite well, and then you have the office-to-residential PDR conversions, which seem to me less good. I see a lot of overcrowding as a local Councillor. Lots of council homes are stuffed as far as possible before people are allowed to move on. Most of the issues that come to me that bother people are either noise or damp. Those are the two things that really seem to bother people when things get overcrowded.

I wanted to ask a couple of things, if different people from the panel could chip in. One is about whether anyone is trying to squeeze the standards on family homes. Is that a model that is being proposed for central London? The idea that people move out of London when they have a family home, and these are entirely for young professionals who can take it, is one thing, but is anyone doing this for families? Have you got examples, Julia, of people in the office-to-residential sector doing a bad job of things like ventilation, leading to problems with damp? Also, is there any sign of that happening for family homes? Are these office-to-residential people generally just going for the lots-of-small-flats option, or is anyone trying to make bigger flats?

Julia Park (Interim Chair, Housing Group, Royal Institute of British Architects): The vast majority of this batch in Croydon in 2014 were very small flats and in fact there were three beds. Perhaps the configuration of the existing office building suited that better. It is not a big enough sample to be robust, I am afraid.

Adam Challis (Head of Residential Research, Jones Lang LaSalle): As a general statement, what Julia has described is true for PDR where they are occurring. You do get a much higher proportion of smaller units, without question. Of course, they are being built to building regulations. To answer perhaps part of the question, Shaun [Bailey AM], that you raised around standards, building regulations still are applied. They are just avoiding some of the conversations that rightly come up as a part of the planning process.

Toby Lloyd (Head of Housing Development, Shelter): One of the problems with PDR is that precisely because they are just permitted, it is very hard to get good evidence, but all the anecdotal evidence would suggest it is very much smaller flats. It is not just that new wave of office-to-residential conversion, though. A huge number of conversions in London are of older existing residential homes - your classic Victorian terrace being broken up into smaller flats - which, if anything, is an argument for building bigger homes in the first place, because that does allow that stock. That stock has proved extremely flexible over the years because it was quite generously proportioned in the first place. An awful lot of Victorian property has gone through multiple conversions and de-conversions, moving with the market to provide larger family homes at some points through knock-throughs, and then being subdivided again. All of these are the benefits you get from having a well-proportioned stock in the first place. If you are always designing for the absolute minimum, you just do not have that flexibility for the future. What we see all the time, unfortunately, is precisely families living in grossly overcrowded conditions because they have just got stuck. They thought this was going to be a step on the ladder and they found that it is not. Their career has not proved as lucrative as they had hoped. They are now locked into a job and a school and find that they cannot just move out of the area to a bigger place somewhere else, and they are now raising two kids in a one-bedroom flat.

Nick Cuff (Land Director, Pocket Living): That is a wider point about land supply as well. There are more variables than just the ones that we are discussing here. Land supply is critical to ensuring that there is a range of tenures. I would say that where there are opportunities for high density in London, we should take advantage of them, because there are fewer of them around. There are much fewer than we think. Once the opportunity is lost, it will not come back to the market for maybe 100 years and maybe never. There are opportunities in suburban locations for family typology stock, and that is the right place for larger family housing dwellings. The context in the townscape is just as important, but where there are sites - like in the centre of Croydon, for example - where you can get to higher densities, you should take advantage of them. In places like Coulsdon, you have opportunities to build more family-type dwellings to meet that niche in the market, too. The market needs to take advantage of what is there, but we must remember that we must not lose the opportunities to build for the demand that we have, which is very, very substantial.

Sian Berry AM: You seem quite insistent that family homes in central London are not an option. I cannot ask you to speak on behalf of all developers, but you are not considering that at all, are you?

Nick Cuff (Land Director, Pocket Living): In certain parts of central London, absolutely, but in some parts of central London where there are opportunities for high density, we should take advantage of that. The central London mega-density opportunities mean that we can get to around the constant of housing that we have tried to set targets for, which is 40,000 to 50,000 a year. At the moment we are delivering 20,000 and so we are falling far short of that. Where there are opportunities in central London for high density, we should go for it.

Sian Berry AM: Julia, just any comment you have on issues of noise. Have you got any experience of that being a problem?

Julia Park (Interim Chair, Housing Group, Royal Institute of British Architects): Yes, absolutely, even in new-build. New-build housing is very energy-efficient, as I am sure you know. We do not seem to be very good at sound yet. It is one of the biggest complaints, in fact probably the biggest post-occupancy complaint from residents. It is a real worry. The baseline in building regulations is quite low, and it seems to be just about acceptable if there is really good workmanship on site, but it only takes someone to cut the socket outlet too deep or something and you have got a rift in the wall that is enough to hear your neighbour.

Toby Lloyd (Head of Housing Development, Shelter): Again, those standards are based on very precise occupancy levels because, of course, everyone will perfectly obey. If it is a one-person flat, there will never be more than one person in there. Of course, that is not true. We quickly find that people do have children or they do have partners moving in with them because they are squeezed out somewhere else, and then suddenly those sound insulation standards start failing because effectively they were not designed for that level of occupancy.

Tom Copley AM (Deputy Chair in the Chair): Are you saying perhaps we need to be looking at designing at least one level up, as it were, in order to future-proof your --

Toby Lloyd (Head of Housing Development, Shelter): Absolutely. If all of our standards are built to the absolute minimum and then the developments get built to that absolute minimum, assuming perfect design and perfect workmanship and exactly the right occupancy, of course they often fail the real-world test quite quickly.

Julia Park (Interim Chair, Housing Group, Royal Institute of British Architects): That is the difference between regulation and standards, is it not? Regulations are known to be a bottom line. They are basically to keep us safe and sound, keep us alive. When we had the Code for Sustainable Homes, we had two higher levels of soundproofing. Frankly, you can build for an extra five decibels over and above building regulations at almost no extra cost. It is a no-brainer. However, because that is not in regulation and because the code was taken away, lots of developers just choose to scrape the bottom line. It is such a pity because, as I say, the extra cost is not significant, and the extra benefit really is.

Just on this thing of numbers, I really wish London would not set targets in terms of only dwelling numbers. It forces you to go small.

Nicky Gavron AM: Yes. You should do it by bed spaces?

Julia Park (Interim Chair, Housing Group, Royal Institute of British Architects): Yes.

Nicky Gavron AM: Or child population?

Toby Lloyd (Head of Housing Development, Shelter): Or square metres of housing. At the end of the day, if we just go for bed spaces, you just encourage people to make smaller and smaller bedrooms.

Julia Park (Interim Chair, Housing Group, Royal Institute of British Architects): Under the space standard, a family of five gets 93 square metres. That is 18 square metres each, which is half as much as a single person in a Pocket flat. In terms of efficiency, it is twice as good if you fill up a family home. I realise they are not equivalent in any other way, but you get the point. It is still a lot of space for one person, even a small home. Not only are we not encouraging a good balance even in city centre locations by expressing targets primarily as numbers, we are missing the point about the number of people we are actually housing.

Tom Copley AM (Deputy Chair in the Chair): This is an interesting point and it is one that we have talked about before. Andrew Boff [AM], our Chair, is very keen on not just, as you say, talking about numbers of units. If you just talk about numbers of units, you can get a lot of one-bed units built just to try to get up to a standard. Do you think we need multiple measures, not one single measure?

Julia Park (Interim Chair, Housing Group, Royal Institute of British Architects): I do. They all tell you different things, and I am really pleased that the new SPG on viability and affordable housing is talking about measuring the affordable housing in terms of habitable rooms.

Tom Copley AM (Deputy Chair in the Chair): Do you think that or square metres is the better?

Julia Park (Interim Chair, Housing Group, Royal Institute of British Architects): To be honest, we disclose them all at planning and I think they all tell you slightly different things. I would not like to burden industry with table after table or burden you with it, but they all tell us slightly different things and they reveal quite surprising things about how much space we are living in.

Tony Devenish AM: I am concerned that the conversation is a little bit narrow because London is a very diverse area. Certainly I know my boroughs are not typical as a whole - the Royal Borough [of Kensington and Chelsea], the City of Westminster and Hammersmith and Fulham - but we have a lot of different problems than some of the things you are describing. The PDR to office thing I know is a bit of a controversial area, but the reality is that one of the big issues we have with that is we end up with too many large flats. It is the opposite. The generalisations that Toby [Lloyd], with respect, made are not always the case. We have the completely opposite problem. In terms of --

Nicky Gavron AM: You do not have PDR yet. You do not have it.

Tony Devenish AM: No. Exactly. The reality is we are still having the problem, though, in terms of homes being turned from two homes to one home. The issue is that London is very diverse. I think we need to look at a whole series of different measures, as Julia [Park] was saying, rather than just one measure. Every borough is very different.

Nicky Gavron AM: Just, by the way, on Westminster, a previous Housing Committee had - I do not know if you were there, Tom - a presentation from Westminster that was talking about just the point you are making now and producing private rented apartments which were spacious. They were for couples, and you had three or four couples with spacious bedrooms and en-suite bathrooms, sharing everything else: sharing the living room, sharing the kitchen. I just thought that was an interesting model.

Tom Copley AM (Deputy Chair in the Chair): Was that 'Be At Home' ?

Nicky Gavron AM: I cannot remember the name of it, but they were pioneering it in Westminster.

Tom Copley AM (Deputy Chair in the Chair): There was another one at the Olympic Park. No, East London is doing that, I think.

Nicky Gavron AM: Yes, just as another answer to the problem. It was space. We also had investigation into design, which looked at the European model of trading, in a sense - they do not see it that way - gardens for more space. Families could live in apartments, and space is what they wanted, rather than outdoor amenity, as long as you were quite close to green space and parks. That is interesting, because we are asking more and more families now to live in apartments. We need them. We need more families to live in apartments.

Tom Copley AM (Deputy Chair in the Chair): Are there any comments on that?

Toby Lloyd (Head of Housing Development, Shelter): I would agree that one of the problems in this country is the massive preference, especially for families, for houses over flats. It is not because there is anything inherently wrong with living in a flatted development. It is because we tend to make flats in this country really small and families do not like living in really small spaces. Decent-sized apartments are extremely attractive to families. We just do not build them here.

Adam Challis (Head of Residential Research, Jones Lang LaSalle): Clearly, Nicky, the point that you are making is around the access to wider amenity and whether that is privatised or semi-privatised within a building or within a development, or whether it is access to, in Tony's [Devenish AM] constituency, Hyde Park on your doorstep, or one of the other nearby public green spaces. That creates a possibility to use public services alongside your private requirements to get the balance. Clearly, if you do not have access to that public green space, then all of a sudden the opportunity to live in a flatted apartment without your own green space becomes a problem.

Sian Berry AM: Before we move on to the low-carbon side of things, I wanted to ask about planning issues. You started to touch on that: how do you define your targets? I just wanted to ask each of the people on the panel what recommendations you have for new planning rules, and we have the SPG on viability but we get to write a new London Plan as well. Presumably, do not relax space standards is your recommendation from most of you. Are there any other planning rules you think are needed --

Tom Copley AM (Deputy Chair in the Chair): That is quite a broad question --

Sian Berry AM: That relate to space in order to ensure that people --

Toby Lloyd (Head of Housing Development, Shelter): I would just second Julia's [Park] call that if you only count units, then - guess what - you will get smaller units. Julia is quite right that all of the measures give you a slightly different angle on it, and they are all collected anyway, so it is not a big deal. It is not an extra burden to monitor these things and publicise them: number of habitable rooms, number of bed spaces, and just square meterage. People who come from abroad are just horrified that in this country you can sell a home without specifying how big it is. It is extraordinary. It is a bizarre market. We do not publicise, we do not collect and we do not publish the square meterage of the homes in this country. How do we expect the market and the pricing mechanisms to function effectively in those circumstances? I would personally go even further and say we should be talking about the volumetric measure.

Tom Copley AM (Deputy Chair in the Chair): Ceiling heights and everything?

Toby Lloyd (Head of Housing Development, Shelter): Yes, that matters, too. What we all live in is the space of our homes, and we should be reporting on that and using that to monitor how much housing we are building and occupying. We do not all live in dwelling units. We live in housing space. An awful lot of the increase in numbers that has come in recent years has not been from an increase in housing space at all. It has just been by subdividing it.

Adam Challis (Head of Residential Research, Jones Lang LaSalle): There is an opportunity within the SPG - and I have made my points already about build-to-rent - to have a broader conversation about unit space standards or space sizes alongside the wider offer within a purpose-built rented block. It is too narrow a definition to think about space standards purely in terms of the private unit space without considering what else is being contributed in terms of the rooftop gardens, in terms of the laundry space that Tom [Copley AM]

referred to, in terms of dining rooms, whatever other communal spaces that are part of the broader offer. Nicky [Gavron AM] made reference to it, to an example in central London that was a little bit different.

If we are focused solely and entirely on the space standard conversation in isolation, we are missing a bigger trick here, particularly if that bigger trick represents (1) what people are looking for and (2) an opportunity to attract a whole new wave of money into this space that has been held back from being able to invest in residential, and I am talking about institutional money, that acts as a part of a big catalyst to a new wave of supply, a new wave of part of the solution here. It would be short-sighted not to at least be open to that conversation. Where we end up with that debate is one that I would leave for you, but to close off the debate before it has started is not doing our best for London.

Sian Berry AM: Essentially you are saying that for certain bits like build-to-rent, you do want to have space standards?

Adam Challis (Head of Residential Research, Jones Lang LaSalle): Yes. I am talking about build-to-rents specifically, where we have already started to create a new definition within the SPG. That allows us to have a conversation that at least more accurately reflects the element of the space standard conversation that I certainly am most comfortable with. To go back to your earlier point, this is not a conversation about unwinding all of the good work that was done in 2011 with respect to family housing. We are talking about Shaun's [Bailey AM] earlier point about getting access at the front end for individuals, for couples pre-family formation in the main, and being able to provide the widest range of choices that are appropriate for that group.

Nick Cuff (Land Director, Pocket Living): I just have a slightly separate point that might be of interest. When I talked about restrictions and exceptions to allow innovation to happen but in a closely regulated environment, which is important, we do not need any more planning regulation to do that or building regulation. What we do absolutely need, and what London is losing - almost, it feels, on a day-to-day basis - is design capacity within local authorities and perhaps also at the Greater London Authority (GLA). We were having an advanced meeting for a very large and important scheme - for us, anyway, relatively small for others - in the London Borough of Ealing, and we were with the local authority's team, and they said that they no longer had a design officer or team at the local authority level and were now entirely reliant on the GLA's design function. There are many problems with that, but one of the key ones is that if you do have innovative products, which can be supportable in design terms, how are you able to find the support if there is no one with any expertise left in a local authority to make value judgments to allow members then to form an ultimate judgment? If we lose that capacity, then we lose innovation, in a way, through the back door.

Nicky Gavron AM: From this round of comments, one of the things we have gleaned is that we need to recommend that housing space standards are put in different ways. I like the volumetric; I like the bed spaces.

Just on the bed spaces, I have been around so many three-bed homes and three-bed is really what we are getting for families and we need to have targets for four- and five-bed. What you get in three-bed is a single room and so you get two doubles and a single and sometimes one double and two singles. That just does not work properly for a reasonably sized family. We do have already space standards, 37 square metres, for small homes and so we already have that. I am interested.

Tom Copley AM (Deputy Chair in the Chair): Can we move on to climate change?

Nicky Gavron AM: Zero-carbon. There is only really one question and maybe some follow-ups, which is perhaps first to Julia. Do you think that the Mayor's aim of zero-carbon homes is going to make small flats even more attractive? Is it going to be easier to achieve the aim?

Julia Park (Interim Chair, Housing Group, Royal Institute of British Architects): No. It is a bit of a red herring, if I might say so. Smaller homes typically have less external wall area than bigger homes, so they are going to be energy-efficient in terms of the fabric of the dwelling. They are usually single-aspect. They often only have one window. They are going to be energy-efficient, probably at higher risk of overheating and poor ventilation. That is slightly off to one side. In terms of zero-carbon, which is a different metric, as you know, it is much harder to achieve zero-carbon at high density because your options for --

Nicky Gavron AM: At high density? You mean stacked above each other?

Julia Park (Interim Chair, Housing Group, Royal Institute of British Architects): Yes. Your energy efficiency is fine. That is sorted because we have less external wall area anyway and we know what to do with that. We can make that energy-efficient. In terms of zero-carbon, sensible options for renewable energy and renewable technology run out. You have limited roof space. You cannot use photovoltaic (PV) panels, which are the most cost-effective way to bring renewable energy into an individual home. You can do a little bit to top up the landlord's lighting supply in communal areas with PV, but we have already talked about the pressures of needing that for roof space as well, and we also need it for biodiversity. High-density and zero-carbon are not natural bedfellows, but clearly they are both worthy aims in a city like this.

Nicky Gavron AM: Can I just ask, Julia, are you talking about high-rise? It is pretty well established that high-rise is not carbon-efficient, but what are you talking about in terms of density?

Julia Park (Interim Chair, Housing Group, Royal Institute of British Architects): Zero-carbon for housing is measured per dwelling. The smaller your dwellings are, the more you stack them up, the closer together you stack them, whichever way you increase density - and we are doing all of those things at the same time - you are making it harder to achieve zero-carbon because of the limitations on renewable technology.

Toby Lloyd (Head of Housing Development, Shelter): Can I just add to that? There are also rebound effects with smaller homes. While they are cheaper to heat, which is a major use of carbon in the home, there are rebound effects as well. Firstly, you end up often with overheating issues and, therefore, using more ventilation and air-conditioning, but also drying. Clothes-drying is such a massive issue in small, very well-insulated flats that people are often required to use electric dryers. I am not saying that that should counteract every possible advantage of greater energy efficiency and it is still probably, in balance, a good trade-off, but these things do have to be considered when you are talking about cramming more and more people into smaller and smaller places. There is a limit to how much the heating efficiency gain will give you in zero-carbon terms.

Nicky Gavron AM: Shared resources win in terms of larger flats, larger occupation. Can I ask Pocket what it thinks?

Nick Cuff (Land Director, Pocket Living): A lot of it depends on the building itself. Larger buildings will have more coverage on the roof to provide renewables. Julia [Park] is broadly right that the residential industry at the moment - and not just smaller units, but units more generally in flatting developments anyway -

is some way off in terms of technology and meeting zero-carbon requirements. We are all required to offset at the moment to meet our targets and standards.

Nicky Gavron AM: You do not have to, by the way. You do not have to offset. You can go 100% zero. It is just that if you want to pay, the polluter can pay.

Nick Cuff (Land Director, Pocket Living): Unfortunately, we do not have the technology to get to zero-carbon at the moment on dense developments. On smaller developments, potentially, but on dense, flatted schemes, Julia is right. We do not have the technological mitigation at this stage to achieve zero-carbon. Therefore, we go as far as we can within the regulations by putting on PVs, going for energy-efficient boilers and things like that, but ultimately, even with our best efforts, we are not able to get to the zero-carbon standard at this stage.

Nicky Gavron AM: What do you do with your modular housing? I have seen modular housing which has passive house standards, using mineral wool insulation, using wood. You do it, do you not?

Nick Cuff (Land Director, Pocket Living): Yes, we do it, and we do it to factory standards. One of the benefits is that we reduce pollution on site by 60% through the modular system - dust, construction, all of that - and we do have a very high-standard product that is built in a factory, which results in less deficiencies once we have completed the units. For example, our Lewisham scheme, which we completed last week, we only had eight tickets. A ticket is a problem. Normally we expect about 120 per scheme and so having only eight problems identified so far - small problems, but problems nonetheless - is a great sign. Factory solutions do yield better technology, better energy, noise and insulation efficiencies, but they do not get to zero-carbon at this stage, I am afraid.

Leonie Cooper AM: I agree with you that at the moment perhaps the technology is underdeveloped, but Nicky [Gavron AM] just mentioned the passive house. I would have thought that there is some possibility, certainly having spoken to people who are doing passive developments - and I would be interested to hear what Julia has to say from the RIBA perspective on this - of moving quite a long way towards zero-carbon. Heat pumps, which have the potential for a coefficient of performance of up to eight to one, still require further development to achieve that while running, but do we not have the potential to get almost there? The off-site construction really helps with all the issues to do with ventilation, because if you have constructed - it comes back to our discussions about making good use of small space - a property on passive principles, then it is going to be dealing with a lot of these issues of the actual usage of people inside it. In many ways, that is utilised by the building in terms of how you heat it. I just wondered how far Julia maybe thinks we are away from that and anyone else who wants to comment.

Julia Park (Interim Chair, Housing Group, Royal Institute of British Architects): I am not really an energy expert, I am afraid, and so I am probably not the right person. I do know, though, that passive house originated with individual dwellings and it is the stacking up of dwellings and the density that makes it difficult. We can just about get there with a combined heat and power (CHP) plant, but the GLA's own guidance suggests that that is only efficient for developments of 500 or more dwellings, which is huge. The vast majority of developments are much smaller than that. We do have to pay our way out of it at the moment. It is not through laziness.

Leonie Cooper AM: Offsets. Yes.

Toby Lloyd (Head of Housing Development, Shelter): I am not aware of any passive house schemes that work for flatted developments. They are all, as far as I know, house developments.

Nick Cuff (Land Director, Pocket Living): Low-density, yes.

Toby Lloyd (Head of Housing Development, Shelter): In the context of talking about space standards, I cannot understand why we would be talking about reducing space standards unless we are talking about flatted space and so it just does not follow.

Adam Challis (Head of Residential Research, Jones Lang LaSalle): The modular point is an important one. In terms of Nick's [Cuff] earlier point, modular really starts to make sense when you can create some replicability. There is a link here with modular and density and, therefore, getting some efficiency. Of course, the precision engineering of factory conditions instead of out on site means that some of the encumbrances that Julia [Park] described around timing of different services being put in at different points - and perhaps a socket being cut too deep was the example - those error factors, are largely wiped out or largely removed. You get a much better product. This is not where we were coming out of the war. This is a much different product that is being brought forward today. There are plenty of good examples elsewhere in the world - Japan, Sweden - where modular represents a big proportion of delivery.

The one point - I am going to sound like a bit of a broken record - specifically in terms of the viability for rented product, there is a real story here, because unlike a for-sale product that is reliant on the pace of sales, the faster you can rent a product, the faster you are getting an income. Building on site being quicker in terms of the physical construction has a real benefit in purpose-built rented product. It is one space where I think you will see modular getting a lot more traction than perhaps elsewhere in the housing market.

Leonie Cooper AM: You get your return on the investment so much more quickly. Nicky [Gavron AM] and I are both aware of passive developments that are not just single dwellings. I would have thought, maybe in the way that off-site modular construction is going to deliver some benefits, if we are looking at - rather than off-site solutions - trying to drive solutions into each property, it would probably help the development of the renewables that would then help us in achieving that. I can see people nodding. Yes. Thank you.

Tom Copley AM (Deputy Chair in the Chair): Thank you very much. We have reached the end of that session. Can I thank our guests very much.