

## House Building statistics: incorporating data from other Approved Inspectors

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### **Summary**

This note explains our proposal to improve the coverage of the Government's National Statistics on House Building and sets out the impact this would have on the headline figures. We estimate that at present the statistics miss around 6 per cent of house building in England. We believe the proposal represents an important improvement to the House Building statistics and we invite users to contribute their views.

### **Data sources used currently for the House Building statistics**

All data on starts and completions come from building control officers who are responsible for visiting building sites and certifying that new homes comply with building regulations. Two groups of inspectors carry out most residential building control work in England. These are;

- a) Inspectors working for local authority (LA) building control teams
- b) Inspectors working for the National House-Building Council (NHBC), the largest private building control company.

These two groups have provided all data for the quarterly House Building statistics release for many years and the supply, quality and validation of their data are well established.

However there is a third group of building control inspectors, which we refer to as other Approved Inspectors (AIs), who cover the remaining part of the market.

### **Other Approved Inspectors**

Other Approved Inspectors began to enter the building control market in the 1990s, but as the proportion of starts and completions inspections undertaken by this group was initially very small the Government did not include them in its statistics on house building.

Since the early 2000s we have monitored this proportion using occasional surveys, and responded to some apparent growth in its size by introducing in 2008 a quarterly online data collection.

Since 2009 an estimate of the number and proportion of starts and completions certified by other Approved Inspectors has been included in a

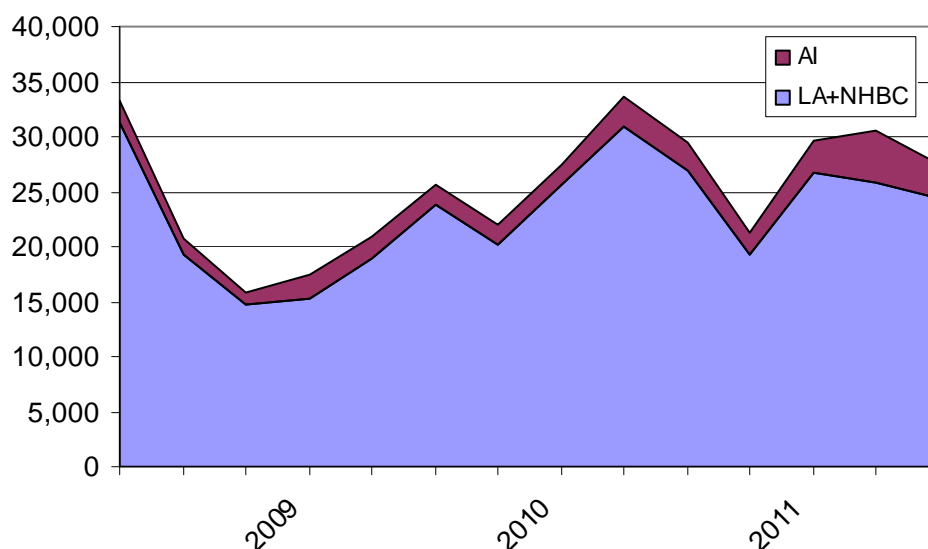
separate section in the quarterly House Building statistical release. As we now have several years of data on a consistent basis, we are moving to incorporate data collected from other Approved Inspectors in the main statistics. We are doing this initially by publishing this note, alongside the regular statistical release, in order to give users an opportunity to comment on the proposed change.

This improvement is intended to give a more complete and therefore accurate picture of house building starts and completions (as certified by all building control inspectors). However it is essential that this change, which will have a substantial impact on the figures, is introduced in a way that is appropriate and clear to all users.

Therefore the quarterly statistical release and live tables continue to be based on the two established data sources (and do not yet include the AI data) while we seek the views and comments of users on the implementation and presentation of this change. We will take these into account before we commit to incorporating data from other Approved Inspectors fully into the regular House Building statistics.

### Approved Inspector data on starts

**Graph 1: Impact of incorporating Approved Inspector (AI) starts into Local Authority (LA) and NHBC starts, England: quarterly**



In graph 1 above we illustrate the impact on the current quarterly starts data for England (non-seasonally adjusted) of incorporating starts certified by other Approved Inspectors. The graph shows the time series based on AI data

stacked on top of the existing starts time series which is based only on LA and NHBC data.

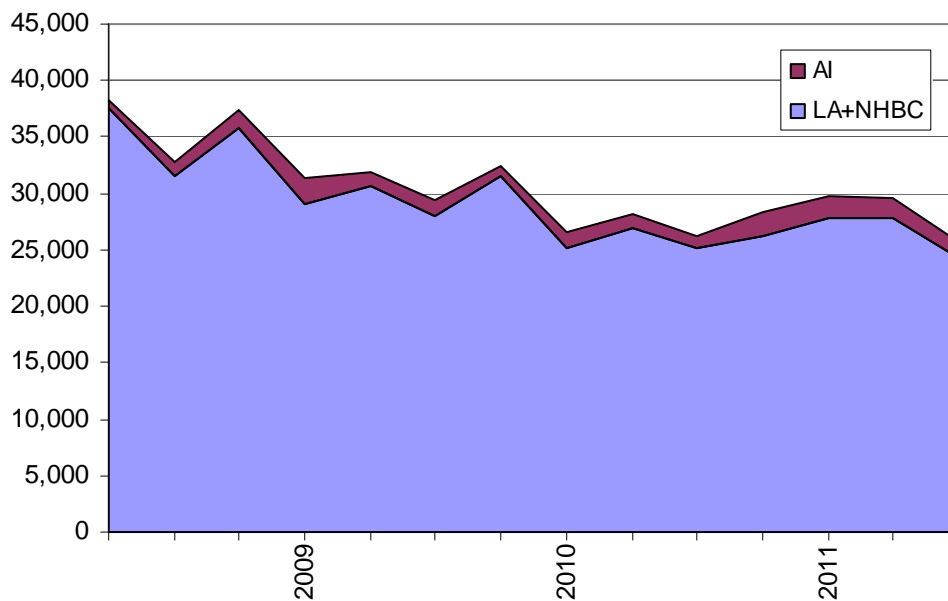
In all but the second quarter of 2011 presented above the Approved Inspectors add between 1,000 and 3,000 additional starts, equating to a fraction of between 6 per cent and 12 per cent. In the second quarter of 2011 the proportion of starts certified by AIs rose to 15 per cent of the total (4,630 units).

### Approved Inspector data on completions

In graph 2 below we illustrate the impact on the current quarterly completions figures for England (non-seasonally adjusted) of incorporating completions certified by other Approved Inspectors. Again the graph shows the time series based on AI data stacked on top of the existing time series based only on LA and NHBC data.

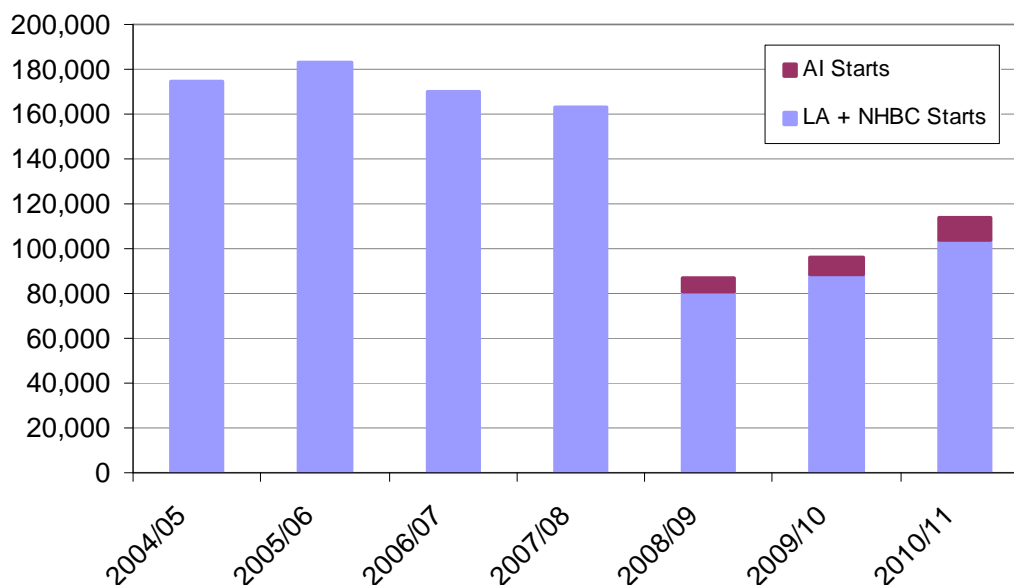
The proportion of new homes certified by Approved Inspectors each quarter has varied but has generally been in the range of 2 - 6 per cent although in quarter four of 2010 the proportion rose to 8 per cent, or 2,200 units.

**Graph 2: Impact of incorporating Approved Inspector (AI) completions into Local Authority (LA) and NHBC completions, England: quarterly**



## Impact of including Approved Inspector data, England: annually

**Graph 3: Impact of incorporating Approved Inspector (AI) starts into Local Authority (LA) and NHBC starts, England: Annual**



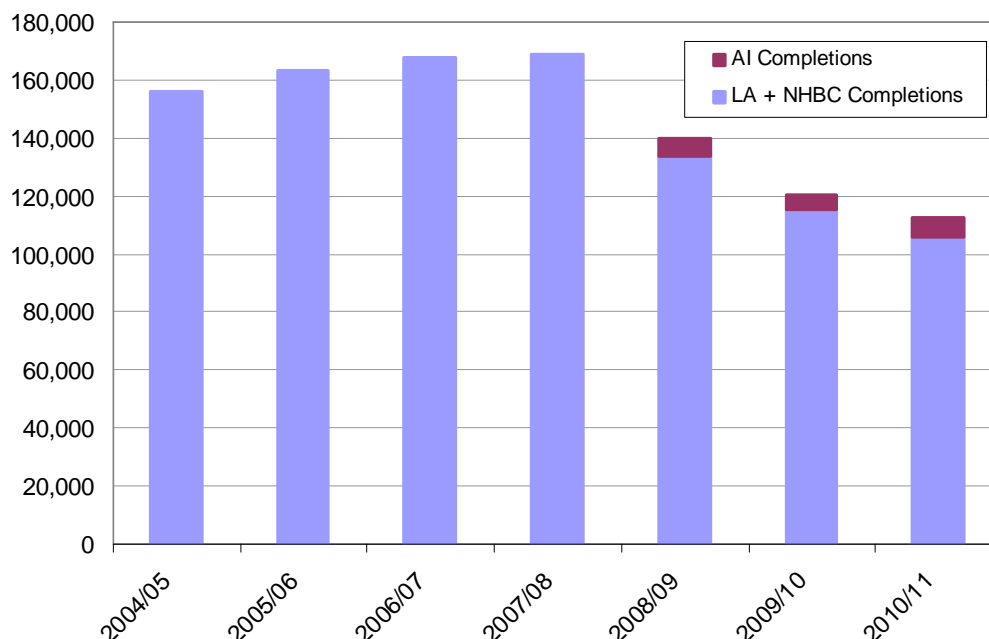
In graph 3 we show the effect of incorporating the Approved Inspectors data on starts on an annual basis. It is clear that the incorporation of the AI data has little impact on the overall trend of starts. Annual data for starts by tenure are given in the table below. The percentage impact of the Approved Inspectors' work is shown alongside each figure on the right. For example in 2010/11, the 6,990 Private Enterprise AI starts form 8 per cent of the new total number of starts.

**Table 1: annual starts, England**

	PE	HA	LA	Total	PE	HA	LA	Total
<b>Approved Inspectors</b>								
2008/09	4,740	1,520	0	6,740	5%	5%	0%	5%
2009/10	5,660	1,780	0	7,430	7%	8%	0%	7%
2010/11	6,990	3,130	0	10,130	8%	12%	0%	9%
<b>LA + NHBC</b>								
2008/09	94,500	27,010	1,440	122,950	95%	95%	100%	95%
2009/10	80,190	21,000	1,370	102,560	93%	92%	100%	93%
2010/11	79,460	22,660	1,570	103,690	92%	88%	100%	91%
<b>LA + NHBC + Approved Inspectors</b>								
2008/09	99,250	28,530	1,440	129,690	100%	100%	100%	100%
2009/10	85,840	22,780	1,370	109,990	100%	100%	100%	100%
2010/11	86,450	25,790	1,570	113,820	100%	100%	100%	100%

PE – Private Enterprise, HA – Housing Association, LA – Local Authority

**Graph 4: Impact of incorporating Approved Inspector (AI) completions into Local Authority (LA) and NHBC completions, England: Annual**



In graph 4 we show the effect of incorporating the Approved Inspectors completions data on an annual basis. As for starts, the incorporation of the AI data has little impact on the overall trend. Annual data for completions by tenure are given in the table below. Alongside each figure in the table below we state the proportion it forms of the new total figure.

**Table 2: annual completions, England**

	PE	HA	LA	Total	PE	HA	LA	Total
<b>Approved Inspectors</b>								
2008/09	4,510	920	0	5,700	4%	3%	0%	4%
2009/10	3,710	1,380	0	5,050	4%	5%	0%	5%
2010/11	5,000	1,530	0	6,530	6%	6%	0%	6%
<b>LA + NHBC</b>								
2008/09	106,030	27,920	830	134,780	96%	97%	100%	96%
2009/10	78,860	24,330	1,760	104,940	96%	95%	100%	95%
2010/11	81,980	22,760	1,310	106,050	94%	94%	100%	94%
<b>LA + NHBC + Approved Inspectors</b>								
2008/09	110,540	28,840	830	140,480	100%	100%	100%	100%
2009/10	82,560	25,710	1,760	109,990	100%	100%	100%	100%
2010/11	86,980	24,290	1,310	112,590	100%	100%	100%	100%

## Response rates from other Approved Inspectors

The table below shows the number and proportion of other Approved Inspector companies operating in England who have responded to our data collection in each quarter.

		respond	non-respond	total	percent
2008	Q1	43	17	60	72%
	Q2	43	17	60	72%
	Q3	43	17	60	72%
	Q4	43	17	60	72%
2009	Q1	43	17	60	72%
	Q2	42	18	55	67%
	Q3	42	18	55	67%
	Q4	44	16	55	71%
2010	Q1	45	15	60	75%
	Q2	46	14	60	77%
	Q3	43	16	59	73%
	Q4	41	20	61	67%
2011	Q1	46	15	61	75%
	Q2	46	15	61	75%
	Q3	45	15	61	74%

## Methodology for adjusting for non-response

Adjustment (or 'grossing') for non-response, rests on the principle that non-responders on average will be like responders. A simple interpretation of this principle would be that each non-responder will have certified the same number of starts (or completions) as the 'average' responder.

For example, let us assume that 40 AIs from a total of 60 provide data on starts in one quarter, and therefore that 20 do not respond. Let the total number of starts reported by these AIs be 4,000, yielding an average of 100 per responding AIs. If we assume the AIs who did not respond also averaged 100 starts the method adds  $100 \times 20 = 2000$  to the reported number of starts, thus yielding an adjusted (or 'grossed') total of 6,000. This approach is shown by the following formula;

$$grossed\_total = responders\_total \times \frac{N}{n}$$

Where N is the total number of Approved Inspectors and n is the number who provided data.

This principle is refined to provide more accuracy. We use 'auxiliary' information that is available to us about each Approved Inspector company. It is known how many inspectors work for each AI and the grossed total

therefore can be adjusted to take account of whether the non-responders are large or small companies.

To do this the refined approach groups together AIs of similar size. For each sub-group we compute the total number of starts reported by the responders in that group. We then apply the methodology above to the sub-group and obtain a sub-group grossed total. If there are no non-responders in the group the grossed subtotal is identical to the reported subtotal. The final grossed total is then the sum of the grossed totals for each sub group.

Therefore if all non-responders are in the group for AIs with a full-time equivalent staff of one, we will only assume that each would have accounted for the same number of starts as other AIs with a single inspector.

### **Impact on comparability between the countries of the UK**

Official statistics on house building in Scotland, Wales and Northern Ireland are produced separately by the devolved administrations in those countries. In Scotland and Northern Ireland the data sources used already incorporate any starts or completions for which the building control certification is provided by other Approved Inspectors. Therefore, the incorporation of data from Approved Inspectors should make the statistics for England more closely comparable with those for Scotland and Northern Ireland.

In Wales, as in England, data for other Approved Inspectors are not currently included in house building statistics but it is thought that the proportion of residential building control carried out by other Approved Inspectors is probably smaller for Wales than for England. The Welsh Assembly Government is investigating the amount of residential new build work carried out by other Approved inspectors in Wales

### **User consultation**

We are making the AI data available alongside but separately from the main regular statistical release in order to give users an opportunity to comment on the proposed changes before the data are incorporated in the regular statistics. We have taken this approach chiefly for two reasons.

- a) The incorporation of the AI data will result in a modest level shift (see above) in the time series for starts and completions from the start of 2008, when we began to collect data from other Approved Inspectors regularly. This is an inevitable consequence of an improvement to the coverage of the statistics, but comparisons made between time points

before and after the introduction of the data will be complicated to some extent by the change.

- b) Over recent quarters we have tended to achieve a response from between 65 and 75 per cent of independent Approved Inspector companies. We believe this is adequate to produce usable estimates for this relatively small portion of the market, but this response rate is lower than that received from local authorities (90 – 95 per cent) and the NHBC (100 per cent).

We ask users to contact us if they wish to comment on any aspect of the change outlined in this note, including the methodology we use to adjust for non-response.

**Contact details**

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