

# Housing Standards Review - Security

Final Implementation Impact Assessment



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Title: Housing Standards Review - Security Final

Implementation

**IA No:** RPC14-CLG-2276

Lead department or agency:

Department for Communities and Local Government

Other departments or agencies:

Impact Assessment (IA)

Date: 27/03/2015

Stage: Final Validation

Source of intervention: Domestic

Type of measure: Secondary

Legislation

**Contact for enquiries:** 

RPC<sup>1</sup> Opinion: GREEN

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Summary: Intervention and Options

Cost of Preferred (or more likely) Option								
Total Net Present Value	Business Net Present Value	In scope of Measure One-In, Two- Out?						
	£105.25m	£-10.92m	Yes	Zero Net Cost				

#### What is the problem under consideration? Why is government intervention necessary?

There are a large number of complex, overlapping or contradictory housing standards, which each local authority can require for new homes through the planning system. This can add unnecessary build costs for home builders.

Security standards are one of the measures more commonly imposed in this way. Whilst there is evidence that these requirements reduce the incidence of burglary, they are often criticised for being disproportionate, costly and overly bureaucratic in their application.

#### What are the policy objectives and the intended effects?

The policy objective is to introduce a simplified and rationalised, single security standard which will provide protection from burglary for all new homes. A single, consistently applied requirement, applied through the building regulations, will eliminate uncertainty and unnecessary delay while reducing administrative process costs associated with local standards. The proposed new standard uses the most cost effective elements of existing standards and avoids added process costs. The latter is achieved by using building control bodies, who are already required to carry out third party checking, to check compliance rather than involving additional third party processes.

# What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)

Option 1: Do Nothing. Continue to allow costly current optional local security standards to be introduced.

Option 2: Introduce a simplified, mandatory security standard as a new Part Q of the Building Regulations. This will reduce the burglary risk in all new homes while significantly reducing the build and process costs associated with current standards.

<sup>&</sup>lt;sup>1</sup> Regulatory Policy Committee.

<sup>&</sup>lt;sup>2</sup> Equivalent Annual Net Cost to Business.

Will the policy be reviewed? It will/will not be reviewed. If applicable, set review date: Month/Year							
Does implementation go beyond minimum EU requirements?  Yes / No / N/A							
Are any of these organisations in scope? If Micros not exempted set out reason in Evidence Base.	Micro Yes/No	< 20 Yes/No	Small Yes/No			Large Yes/No	
What is the CO <sub>2</sub> equivalent change in greenhou (Million tonnes CO <sub>2</sub> equivalent)	use gas emi	ssions?	Traded:		Non-	-traded:	

I have read the Impact Assessment and I am satisfied that (a) it represents a fair and reasonable view of the expected costs, benefits and impact of the policy, and (b) that the benefits justify the costs.

Signed by t	he responsible
SELECT S	IGNATORY:

# **Summary: Analysis & Evidence**

Policy Option 2

Description: Replace existing standards with a simplified mandatory security standard - Part Q

#### COSTS AND BENEFITS TO BUSINESS ASSESSMENT

Price	PV	Time	Net Benefit (Present Value (PV)) (£m)				
Base	Base	Period	Low: 59.30	High: 141.82	Best Estimate: 105.25		
Year	Year	Years 10					
2014	2015						

COSTS (£m)	Total Transition (Constant Price) Years		Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	1.55			1.55
High	2.32	3		2.32
Best Estimate	1.93			1.93

#### Description and scale of key monetised costs by 'main affected groups'

Familiarisation and training costs to business associated with introducing the Part Q security standard for all new homes. It is estimated that the transition costs will spread over 3 years with 70% in 2015, 20% in 2016 and 10% in 2017.

#### Other key non-monetised costs by 'main affected groups'

As this is a validation Impact Assessment the costs and benefits presented are for business only. All of these costs have been monetised.

BENEFITS (£m)	Total Transiti (Constant Price) Yea	•	(Present Value)
Low		7.16	61.62
High		16.66	143.37
Best Estimate		12.45	107.19

#### Description and scale of key monetised benefits by 'main affected groups'

The benefits identified are the savings in build and process costs associated with replacing the current Secured by Design (SBD) standard with a simplified mandatory standard for all new homes.

#### Other key non-monetised benefits by 'main affected groups'

As this is a validation Impact Assessment the costs and benefits presented are for business only. All of these costs have been monetised. However, additional analysis on the social impacts has been undertaken at the back of this Impact Assessment.

#### Key assumptions/sensitivities/risks

Discount rate

3.5

Only 2 options have been estimated for this final Impact Assessment, the Do Nothing and the government proposal. However as a sensitivity test the impact of an optional rather than mandatory approach for local authorities is analysed in the Risks and Assumptions section. High and Low estimates have been made assuming slight variations in transition costs, the build rate and the take-up rate.

# **BUSINESS ASSESSMENT (Option 2) in 2014 prices**

Direct impact o	n business (Equival	In scope of OITO <sup>1</sup> ?	Measure qualifies as	
Costs: 0.22	Benefits: 12.45	Net: 12.23	Yes	Zero net cost

<sup>1</sup> One In Two Out.

# Evidence Base (for summary sheets)

#### Problem under consideration

- 1. The problem under consideration is the negative impact of the large number of local and national technical housing standards which each local authority can require house builders to integrate in new development through the planning system. Many of the housing standards are complex, can be duplicative or contradictory with each other and also with some aspects of the Building Regulations, and there are significant variations in interpretation between local authorities. There are also multiple unaccountable agencies undertaking compliance checking, but without a single authority able to efficiently resolve conflict or contradictions where these arise.
- The application of this wide range of housing standards therefore leads to uncertainty, delay and additional process and material costs for house builders particularly where housing standards are set differently by authorities. This can mean house builders have to tailor their housing designs to the requirements of individual local authorities' requirements.
- 3. Taken cumulatively this increases the development costs for house builders and could be seen to obstruct growth since the additional costs can make some developments economically materially less viable. Demonstrating compliance with additional housing standards typically imposes additional administrative costs for house builders because they have to invest significant resources. House builders are also less capable of achieving economies of scale and improving efficiency because managing a wide range of technical standards displaces activity to improve productivity.
- 4. With the exception of the Code for Sustainable Homes, the standards adopted are not owned or written by the government. There are a number of problems that arise from this arrangement. The evolution, development and updating of technical requirements are not undertaken in a suitably accountable manner, or within a framework which evaluates value for money and which seeks to avoid clashes with other standards. This can mean that Industry is not able to deliver in the most cost effective way.
- 5. Because the Standard owners are largely non-accountable to the public and Industry, they can update their standards and requirements with no advanced warning or transition time. There is also insufficient evaluation of the most efficient way to deliver specific outcomes. This creates a high degree of uncertainty and risk for home builders and designers who find themselves operating in an unpredictable environment which requires them to invest a great deal of time ensuring they keep up to date with changing standards which are often not cost optimal.
- 6. Each local authority can choose to apply a differing range or combination of housing standards, which increases complexity of compliance generating as it does a wider range of permutations and combinations which designers need to meet. This adds a further layer of cost, complexity and bureaucracy for house builders. Uncertainty relating to technical requirements also increases real and perceived risk, reducing appetite to bring forward new development.

7. Security standards are one of the measures more commonly imposed in this way. Whilst there is evidence that these requirements reduce the incidence of burglary, they are often criticised for being disproportionate, costly and overly bureaucratic in their application.

#### Rationale for intervention

- 8. Local Authorities typically apply standards in order to respond to a range of different market failures in the construction of new homes, including externalities, information failure, market power, agency split incentives and public goods issues.
- However, the lack of co-ordination across standards and the way they are introduced, modified and enforced undermines the effectiveness of efforts to correct for such market failures. This results in unnecessary costs, uncertainty and delay being incurred by house builders.
- 10. An independent review by Sir John Harman in 2012 found that local housing standards tend to have been developed in isolation and without regard to each other. The review also found that the majority of standards are overly complicated and recommended a more structured, government led programme to negotiate between the various owners to deliver a more coherent set of requirements for home builders, consumers and authorities.
- 11. The evidence developed by EC Harris shows that without Government intervention the number of local authorities adopting standards in their policies will continue to increase. It is also likely that the number of different standards available for use in policy will also continue to increase over time with the potential for a commensurate increase in the number of compliance regimes and systems.
- 12. There have been two consultations on proposals to rationalise the existing range of standards required of new housing development and applied through local authority planning policy. The first consultation looked at the key principle issues as to which standards should be retained, provided an illustrative set of technical standards for consideration and discussed the principles of how the policy might be implemented.
- 13. The first consultation sought views on whether security standards should be covered by national standards/building regulations or left to market forces. There were 271 responses to this question. Of those, the majority (85%) believed that domestic security for new homes should be covered by national standards or Building Regulations. This support was reflected across all the different sectors that responded. Many of the responses, especially police bodies, suggested that security should be addressed in a single national standard such as Secured by Design (SBD) or by introducing Building Regulations to the same level. Some respondents mentioned a lack of interest by the insurance and warranty sectors in driving better security standards previously. Some also felt that if left to market forces the cheapest option would be adopted leading to less secure new homes.

- 14. On 13 March 2014 Stephen Williams announced the outcomes of the review here is a link to the <u>statement and the supporting document</u>. In summary, the Government proposes to take forward integration of a preferred mandatory security standard, an optional tighter water efficiency standard, and two optional higher standards for accessibility in to the Building Regulations. This impact assessment covers the mandatory security standard separate from the main Housing Standards Review Impact Assessment where the focus is on benefits to business from reducing and recasting existing standards. The Government has committed to implementing these proposals as quickly as possible.
- 15. The second consultation set out the government proposal to implement a security standard, based on the provisions of British Standard Publicly Available Specification 24, as a national mandatory requirement applicable to all new homes. The consultation included detailed draft guidance for the new requirement and this impact assessment.
- 16. Having considered all of the responses, the Government intends to implement the new requirement as proposed. The guidance has been refined in response to specific comments but these refinements have no effect on the findings of this impact assessment.

# Policy objective

- 17. The policy objective is to replace locally applied security standards with a single, simplified and rationalised security standard which will provide protection from burglary for all new homes. A single, consistently applied requirement through the Building Regulations will eliminate uncertainty and unnecessary delay while reducing administrative process costs associated with local standards. The proposed new standard uses the most cost effective elements of existing standards and avoids added process costs. The latter is achieved by using building control bodies, who are already required to carry out third party checking, to check compliance rather than involving additional third party processes.
- 18. The Government considers that the standard for security should be based on the provisions of British Standard Publicly Available Specification (PAS) 24. This is a well established industry standard with a proven track record. Publicly Available Specification 24 sets standards for door and window assemblies including tests and specifications for locks as well as the robustness of the doors and windows themselves. Applying Publicly Available Specification 24 standards on a consistent basis could reduce the costs associated with achieving robust levels of security.
- 19. Publicly Available Specification 24 is a higher standard than common industry practice which typically follows guidance as set out in the National House Building Council standards. However, the level reflects the basic standard recommended by the police for domestic dwellings and also reflects the standard previously required in the HCA Housing Quality Indicators.
- 20. The review also sought to identify the most simple and cost effective approach to compliance. Utilising the Building Regulations and existing building control framework to assess compliance minimises process costs and transitional costs for Industry, who are already familiar with the functioning of this system.

21. A final objective of the review was to find a way to ensure authorities did not layer on additional standards, through the planning process, outside of those developed through the review. A planning statement will set National Policy in order to ensure that this is the case. The net result is a reduction in building costs coupled with the social benefits of improved security standards in all new homes.

# Description of options considered (including do nothing)

- 22. The Do Nothing Option 1 leaves local authorities free to allow an optional Security standard which risks incurring a more significant cost to homebuilders.
- 23. The new proposed Option 2 introduces a simplified, mandatory security standard as a new Part Q of the Building Regulations for all new homes. This will reduce the burglary risk in new homes while significantly reducing the build and process costs associated with current standards.
- 24. An approach where local authorities have a choice to require the new security, which has been previously considered, is also monetised below. But this is not included as a separate option in this Impact Assessment. This is a Final Validation Impact Assessment which focuses on the government's proposed Option 2.

# Monetised and Non-monetised costs and benefits of each option (including administrative burden).

25. As with the accompanying main Housing Standards Review Impact Assessment, this document should be treated as part of a bundle of documents containing the underlying evidence. This consists of an EC Harris Costs Impact Report with Appendices, an EC Harris Local Authority Policy Survey and a Department for Communities and Local Government (DCLG) Housing Standards Review Evidence Report produced by Adroit Economics. Each of these contains sections on security which are drawn on in this Impact Assessment and are discussed below.

# EC Harris cost impacts report

- 26. EC Harris was commissioned by DCLG to carry out a detailed assessment of both build and process unit costs for the impacts of the current standards and new proposals for a range of different dwelling types. There have been internal peer reviews and quality assurance checks made throughout the costing and report writing process. The extensive nature of this research and robust peer review process means we are content that the cost estimates contained in this report are sufficiently robust to form the basis of the analysis in this Impact Assessment.
- 27. EC Harris has revised and substantially developed this work in the light of consultation responses and extensive engagement with industry participants through working groups in the lead up to a public consultation in 2013 and subsequently. For instance, security and energy cost estimates have been significantly revised in the light of consultation responses and industry discussions, especially where costs have been falling due to learning effects. Its "Cost Impacts" Report together with detailed Appendices accompanies this document as part of the bundle. Further details on the Quality Assurance for this cost work can be found in Section 2.7 of the report.

### EC Harris local authority policy survey

28. In addition, EC Harris undertook a survey of local authority plans to inform assumptions about current take up of standards in planning policy and trends as authorities introduce new standards. The EC Harris Survey Report also accompanies this document. Details of how the survey was carried out and what it covered are contained in that report with further information picked up in the Adroit Economics Evidence Report. We consider the extensive nature of the survey and relevant quality assurance checks mean the estimates are sufficiently robust for use in this Impact Assessment.

### Adroit Economics housing standards review evidence report

29. The Adroit Economics Evidence Report outlines the relevant evidence required for making informed assumptions used in the cost benefit analysis based upon the raw EC Harris data. The following sections draw widely on the evidence presented by consultants in each of these three documents which should be seen as an integral part of this Impact Assessment. Again, we consider the nature of the research and relevant quality assurance checks mean the estimates are sufficiently robust for use in this Impact Assessment.

### Underlying estimates

30. The Impact Assessment is based on a central estimate of 5% annual increase in home building over the appraisal period. Analysis has also been undertaken for a low (3%) annual increase estimate and a high (8%) annual increase estimate. This is consistent with the accompanying main Housing Standards Review Impact Assessment section 2.1.2 and based on the analysis in the Adroit Evidence report section 3.

# Phase in during the transition period

- 31. In this analysis it is estimated that the policy will start to take effect from mid-2015. There will be a transitional period of 6 months where the existing standards in the five key areas (on energy, water, access, space and security) can continue to be applied. Other standards will no longer be applied. So for instance a plan policy which currently specifically requires building to the existing Secured by Design standard, can continue to be applied during the transition period. But a general requirement to meet a particular Code for Sustainable Homes level, which may involve obtaining a voluntary credit through applying a security standard, will no longer apply.
- 32. Following this transition period, local authorities will be able to 'passport' the key standards to the nearest new equivalent optional standard where one exists. So where a current policy plan has a specific Secured by Design standard it will be possible to adjust to the new Part Q security.

33. We have worked with Adroit Economics and EC Harris to make the following informed estimate of the pace of the phase in of the new policy.

# Phase in of the policy

- 34. The analysis estimates that the current standards phase out and are replaced by the new policy over time. The approach is similar to that outlined in section 2.1.3 of the accompanying main Housing Standards Review Impact Assessment. The approach uses planning data evidence and consultation feedback to estimate the pace at which changes to standards will take place, given a six month transition period.
- 35. It is likely that savings are achieved throughout the development process from design, before actual start on site, through to completion. DCLG analysis of Glenigan planning data has suggested that to 'start on site' for a typical development can take eight months following planning permission and that the large homebuilders, responsible for a high proportion of build, will start most quickly. The quickest quarter of homes start four months after permissions. Progress from planning permission to completion since 2007 typically takes around 2 years.
- 36. However, given the savings identified in the build process from the new standards, it will be possible for a developer to apply for a planning variation during this build process. In this case it is likely that some savings from the new standards can be realised during the transition process, especially for larger private sector development.
- 37. This build out planning data evidence and analysis, consultation responses and further engagement with Industry, have resulted in the following informed estimates for phase in.

Table 1: Proportion of dwellings built to different permissions								
Homes built to:	2015	2016	2017	2018				
Previous permissions	80%	30%	10%	0%				
Permissions granted during 6 month transition	15%	40%	5%	0%				
Post transition permissions	5%	30%	85%	100%				

38. With Security, for homes built to the Secured by Design standard because of the Code for Sustainable Homes, previous permissions are built to the Code and there will be no 'passporting' of standards during the transition period. Therefore 80% will still be built to the Code in 2015 down to 30% in 2016 and 10% in 2017. Homes built to 'Secured by Design' because of a specific security planning requirement will be 'passported' to the new standard with the old standard being permitted during the transition. This means that in 2015 of those built to existing standards under the 'do nothing', some 95% will still be built to Secured by Design (80% for previous permissions plus a further 15% for permissions granted during the transition), falling to 70% in 2016 and 15% in 2017. The 'post transition' permissions will be built to the new standard.

# Security Monetised Costs and Benefits to business

# Security - Option 1 - Do nothing

- 39. Under the Do Nothing option, in the absence of the proposed changes, the Secured by Design Section 2 requirements would continue to be required for affordable housing, as a method for gaining voluntary points in the Code for Sustainable Homes and through an increasing number of local plans. Developers would face the risk that this standard could change in future with less transparency and consultation.
- 40. In response to the 2013 consultation 79% of respondents disagreed with the costs estimated in the 2013 analysis and of those that disagreed and commented, a large number felt that costs had been overestimated. Some suggested this overestimation was because the Impact Assessment did not take into account the increased number of security products being produced to Secured by Design standards which have resulted in lower costs. A few however felt that the costs were underestimated.
- 41.EC Harris has further estimated costs in the light of these comments and subsequent discussions with interested industry parties. The detailed cost results for Secured by Design are presented in its Cost Report Section 3.1. The cost of building a 3 bedroom semi-detached house to the Secured by Design standard for a large developer is estimated at £299. This is significantly less than in the previous analysis which reflects the consultation responses and information supplied that the cost of building to higher security standards has fallen substantially since its introduction.
- 42. More detailed work has been done by Adroit Economics to estimate the proportion of homes being built to the Secured by Design standard, based upon consultation responses and the EC Harris Survey. The results are in the Adroit Evidence report Section 6. The Survey revealed that 17% of new homes are built in areas with a plan requirement for Secured by Design. The Professionals Survey in table 14 of the Survey Report suggests that 74% of homes in these areas or 12.9% of all new private homes will be built to these standards under the Do Nothing in year 1 as a result of planning policy. We have assumed that 100% of affordable homes will be built to the standard as it is a HCA funding requirement.
- 43. Evidence at consultation has indicated that a significant portion of Code 3 and 4 homes include Secured by Design. It is common for local authorities and local police forces to encourage construction to this higher security standard and there is evidence that this results in a fairly high portion of Code homes being built to this standard. Based on this evidence we have estimated that currently 9.6% of all new homes are built to Secured by Design standards as part of the Code where it would not already be a plan requirement. This is an indication of local efforts around the need for security in new homes.

- 44. The EC Harris Survey Report Table 1 shows that while only 21% of local authorities currently include a firm policy (accounting for 17% of new homes) requiring Secured by Design, there are a total of 44% of local authorities which include a firm or 'aspirational' standard. In addition the Adroit Evidence Report table 4.2 shows an increase in the proportion of new plans containing the requirement, apart from the most recent period where there is a slight drop, though with a small sample size.
- 45. In general, together with evidence of aspiration policy in plans, the evidence suggests that the trend is clearly for more new homes to be built to a higher security standard. Based on this evidence Table 6.3 of the Adroit Evidence report estimates that the proportion of dwellings in a plan area with Secured by Design will increase from an estimated 17% at the start of the appraisal period to 36% in 2024 and reports that some 74% of homes will be built to lifetime homes standards according to the local authority professionals survey. In addition, the proportion of private Code homes requiring security will increase from 9.6% at the start of the appraisal period to 13.6% by 2024.
- 46. Under the Do Nothing, the Secured by Design standard would remain a Homes and Communities Agency funding requirement applicable to all new affordable homes. Based on this evidence, the overall assumption is that 39% of all homes (private and affordable) are currently built to Secured by Design which would increase to 52% by 2024 under the Do Nothing option.
- 47. This is consistent with information supplied during the consultation where a number of consultees were of the view that the 2013 Impact Assessment underestimated the proportion of homes currently being built to Secured by Design standards.
- 48. The process costs are estimated in section 3.1 of the EC Harris cost report. The total home builder and recipient process costs are reported in Tables 5 8. Process costs per dwelling for a small sized development are much larger than for a large development. The total developer and recipient process cost for a small development is £167 per dwelling, a medium-sized is £22 per dwelling and a large development is £16 per dwelling.
- 49. Table 2 below presents the costs for the Do Nothing over the 10 year appraisal period and the total Present value cost at the Green Book 3.5% discount rate. A total present value build cost of £194.2m plus a process cost of £29.6m results in a total present value cost for the Do Nothing of £223.8m.

Table 2:	Table 2: Do Nothing build and process cost (£m)										
	Present Value	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Build	194.2	15.5	16.9	18.4	20.0	21.7	23.5	25.4	27.5	29.7	32.1
Process	29.6	2.4	2.6	2.8	3.0	3.3	3.6	3.9	4.2	4.5	4.9
Total	223.8	17.9	19.5	21.3	23.0	25.0	27.1	29.3	31.7	34.3	37.0

# Security – Option 2: Introducing a new security requirement into Building Regulations for all new homes

#### **Option 2 – Transition cost**

- 50. There will be a transition cost for Option 2 involving familiarisation and training associated with introducing the mandatory standard. The Publicly Available Specification 24 standard is well established with manufacturers of doors and windows and across the house building sector. No new skills or manufacturing facilities will be needed. However, imposing the standard through a new Part Q to the Building Regulations will result in a need for professionals to familiarise themselves with the new approved document and for some standard specifications and other systems may need to be amended.
- 51. Building Control Surveyors will not have been involved in security considerations before and are the group most likely to need time to familiarise themselves with the relevant standards. As with the rest of the industry, however, this would not involve the need to develop new skills. We have estimated the costs as follows.
- 52. Firstly, there are individual industry professionals who will need to familiarise themselves with the new standards and accompanying guidance. Table 3 below is based on Table 59 of the EC Harris Cost report and Table 13.3 of the Adroit Evidence Report which estimated hours for the main Housing Standards Review.

Table 3: Individual industry professionals' familiarisation time							
	Hours	Blended rate (£/hr)	Total per pers on (£/hr)	Estimated number of persons	Total for industry (£)		
Architect	1	52	52	5681	295,392		
Building Control Surveyor	1.5	46	69	230	15,874		
Building Surveyor	0.5	46	23	3787	87,107		
Quantity Surveyor	0.5	57	28.5	2676	76,262		
Construction Energy Assessors	0	48	0	279	0		
Building Service Engineer	0	46	0	942	0		
Civil Engineer	0	47	0	7394	0		
Town Country Planner	0.5	61	30.5	5,595	170,651		
Skilled trades	0.1	18	1.8	169,349	304,828		
Total					950,115		

53. Secondly, there is a cost to professional firms of architects and others to update their systems. The table below is based on table 60 of the EC Harris Cost Report and Table 13.4 of the Adroit Evidence Report which estimate transition costs for the main Housing Standards Review.

	Blended hourly rate (£/hr)	Hours	Cost per firm (£)	Number of firms <sup>1</sup>	Total (£)
Architects	52	5	260	847	220,289
Planners	61	5	305	230	70,170
Surveyors	57	3	171	3,408	582,832
Engineers	47	3	141	200	28,154
Total					901,444

Estimate of numbers of professional firms involved in home building

54. Thirdly, there will be a cost per home builder firm to update internal processes and procedures. The table below indicates the estimated cost for each type of professional consultancy firm. It is based on Table 61 of the EC Harris Cost Report which was produced to estimate the transition cost for the main housing standards review process. Average time per firm has been estimated for transition to the new security standard, bearing in mind that more local firms in areas currently without standards will need to update their records, although again very small firms will not incur the cost as it is likely that consultant architects, engineers and other professionals would be employed, the cost of which are included in the Table 4 above.

Table 5: Home builder updating time								
Size of firm	Hours	Rate (£/hr)	Total Per firm	Number of home builders	Total for Industry (£)			
1	0	52	0	8,587	0			
2 to 3	0	52	0	6,502	0			
4 to 7	0	52	0	2,867	0			
8 to 13	0	52	0	1,056	0			
14-24	0	52	0	622	0			
25-34	2	52	104	198	20,589			
35-59	2	52	104	238	24,706			
60-79	4	52	208	77	15,928			
80-114	4	52	208	60	12,426			
115-299	4	52	208	104	21,640			
300-599	5	52	260	29	7,560			
600-1,199	6	52	312	9	2,933			
1,200+	6	52	312	11	3,575			
				Total	109,356			

55. As for the main Housing Standards Review Impact Assessment it is estimated that these transition costs will be spread over 3 years with 70% in 2015, 20% in 2016 and 10% in 2017. This cost stream is discounted at 3.5% to result in a present value transition cost of £1.93m as outlined in Table 6 below.

Table 6: Transit	Table 6: Transition Costs for Option 2 – Part Q										
£m	Present Value	2015	2016	2017	Total Undiscount ed						
Individual Professional s	0.94	0.67	0.19	0.10	0.95						
Professional Firms	0.89	0.63	0.18	0.09	0.90						
Homebuilder costs	0.11	0.08	0.02	0.01	0.11						
Total	1.93	1.37	0.39	0.20	1.96						

#### Option 2 - Part Q build and process costs

- 56. Option 2 introduces a simplified and streamlined mandatory security requirement for all new homes which will become Part Q of the Building Regulations. The new guidance supporting this requirement focuses only on the provision of doors and windows meeting Publicly Available Specification 24. Whilst this does not replicate the full range of requirements included in the Secured by Design standard, it is widely acknowledged amongst security experts that properly specified doors and windows are the most significant component of the burglary reduction impact of Secured by Design. This makes this approach highly cost effective. EC Harris have undertaken detailed new costing for this new requirement in the light of consultation responses and discussions with a range of industry parties. The results are outlined in Section 4.1 of the EC Harris Cost Report. The cost of building a 3 bedroom semi-detached house to the new Part Q requirement for a large developer is estimated at £79 per dwelling.
- 57. The process of checking compliance will be carried out by building control bodies who are already responsible for checking the home for various parts of the Building Regulations. This means that the process costs will be less than those associated with Secured by Design. An estimate by EC Harris of these costs has been made in their Cost Report in section 3.1 for the Do Nothing and Section 4.1 for the Part Q cost. For instance, for a medium sized development, the total (home builder plus recipient) estimated process cost of £22 per dwelling for a Secured by Design dwelling is expected to reduce to £0.6 for a dwelling built to the Part Q standard.

Table 7:	Table 7: Part Q build and process cost (£m)											
	Present											
	Value	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	
Build	111.1	15.2	14.8	11.5	10.7	11.3	11.8	12.4	13.1	13.7	14.4	
Process	5.6	2.3	1.9	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Total	116.7	17.5	16.6	12.0	10.9	11.4	12.0	12.6	13.3	13.9	14.6	

58. Table 7 presents the costs for Part Q over the 10 year appraisal period and the total present value cost at the Green Book 3.5% discount rate. A total present value build cost of £111.1m plus a process cost of £5.6m results in a total present value cost for Part Q of £116.7m.

# Impact of New Standard over the Do Nothing

- 59. The overall impact of the policy change depends on the costs per dwelling of the new standard relative to the Do Nothing and on estimates of uptake for both the Do Nothing and New standard.
- 60. The cost to business of the policy is the transition cost for implementing Option 2 which is estimated above as £1.93m.
- 61. The benefit to business is the reduction or saving in build and process costs by replacing the Option 1 Do Nothing costs with the Option 2 Part Q standard. This is presented in Table 8 below.

Table 8: (£m)	Benefit -	- Savinç	g betw	een the	Do No	thing a	nd Part	Q build	and p	rocess	costs
	Present										
	Value	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Do Nothing	000.04	47.00	10.51	04.05	00.04	04.07	07.00	00.04	04.70	0.4.00	07.00
Nothing	223.84	17.92	19.51	21.25	23.01	24.97	27.06	29.31	31.70	34.26	37.02
Part Q	116.66	17.50	16.62	12.01	10.90	11.45	12.02	12.62	13.25	13.91	14.61
Saving	107.19	0.43	2.89	9.24	12.11	13.52	15.04	16.69	18.45	20.35	22.41

- 62. Table 8 compares the total costs of the Do Nothing with the total costs of Part Q over the 10 year appraisal period and presents the total net present value saving at the Green Book 3.5% discount rate. The table illustrates that, even though Part Q is required for all new homes, the significantly lower unit cost for Part Q over the Do Nothing results in a significant overall saving to business. The net present value benefit to business is £107.2m. This translates into an equivalent annual net benefit to business of £12.45m.
- 63. The change produces an equivalent annual saving to business of £12.23m (range: £6.9m £16.5m) as broken down in the table below. Although this is clearly an overall saving to business it is nonetheless a regulatory approach albeit an approach that this also delivers a significant degree of simplification. This saving is therefore treated in this Impact Assessment as a 'zero net cost' to business as explained below.

Table 9: Option 2 Business Costs and Benefits								
£m	Present Value	Equivalent Annual						
Costs	1.93	0.22						
Benefits	107.19	12.45						
Net	105.25	12.23						

# Direct Costs and Benefits to Business Calculations (following OITO<sup>4</sup> methodology)

64. The above analysis for this final validation Impact Assessment presents the direct costs and benefits to business of the policy change. The policy does achieve an overall saving to business from recasting an existing requirement through planning regulations. This is estimated above as an equivalent annual net benefit to business of £12.2m. However, it does introduce a new requirement in the Building Regulations for those new homes in areas where security standards are not likely to apply under the do nothing. We have therefore concluded that, under the framework guidelines, this should be considered a 'zero net cost' for One In Two Out purposes.

#### Risks and Assumptions

65. This final Impact Assessment estimates above the costs and benefits to business of introducing the proposed policy of a mandatory Part Q requirement for all new homes as Option 2 above. To inform the analysis we have, as a sensitivity test, estimated the impact if the standard had been introduced as an option for local authorities to implement along the lines of other themes, such as water or access, in the main Housing Standards Review Impact Assessment. The results are presented in Table 10 below. This has not been presented as an option at the front of this Impact Assessment because it has been rejected in favour of the final proposal, Option 2, evidenced above.

	Present	<u>-</u>									
	Value	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Do Nothing	223.84	17.92	19.51	21.25	23.01	24.97	27.06	29.31	31.70	34.26	37.02
Optional	71.91	17.21	14.84	6.84	4.66	5.06	5.49	5.96	6.45	6.97	7.54
Saving optional	151.93	0.72	4.67	14.41	18.35	19.91	21.56	23.36	25.25	27.29	29.48
Saving optional minus mandatory	44.75	0.29	1.78	5.17	6.24	6.38	6.53	6.66	6.80	6.94	7.07

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<sup>&</sup>lt;sup>4</sup> One In Two Out.

- 66. Table 10 shows that if an optional standard was introduced, the present value saving against the Do Nothing option 1 over 10 years is £151.9m which results in an equivalent annual saving of £17.65m. This compares with the saving for the mandatory Option 2, from Table 9 of £107.19m (equivalent annual saving of £12.45m). So the optional standard would achieve a present value saving of £44.75m more than the mandatory approach over 10 years. However, as explored in the next section, the mandatory approach will result in higher social benefits due to reduced risks of burglary.
- 67. High and Low estimates have been made assuming slight variations in build rate, take up rate for the do nothing and transition times. These have suggested that the equivalent annual saving to business net of transition costs is in a range of £6.89m £16.48m with the best evidenced central estimate at £12.23m.

#### Social benefits of security standards

- 68. Security standards carry social benefits as they help reduce the likelihood of criminal, forcible entry. Relevant strategies for housing design can be split into two elements: 1) through environmental and spatial design; 2) physical security of buildings.
- 69. The planning system remains best equipped to address environmental and spatial elements of crime prevention. This is reflected in the National Planning Policy Framework and the supporting policy guidance the proposals under consideration in this Impact Assessment will not change that guidance.
- 70. Building Regulations are more suited to focus on physical security. The proposed new requirement provides that doors and windows would meet the Publicly Available Specification 24 standard. There is substantive evidence that good design can significantly reduce the rate of burglary. However, attempts to quantify the potential reduction in crime have produced varying results. The estimated range of effectiveness of the Secured by Design (SBD) scheme in burglary reduction is 25-70% according to the literature<sup>5 6 7</sup>.

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<sup>&</sup>lt;sup>5</sup> Caledonian Environment Centre (2009). *Secured By Design Impact Evaluation, Key Findings*. Glasgow Caledonian University. April 2009.

<sup>&</sup>lt;sup>6</sup> Vollaard, B. and Ours, J. C. (2011). *Does Regulation of Built-in Security Reduce Crime? Evidence from a Natural Experiment.* The Economic Journal 121 (May), 485-504.

<sup>&</sup>lt;sup>7</sup> Armitage R. (2013). *Crime Prevention through Housing Design: Policy and Practice*. Palgrave Macmillan: Crime Prevention and Security Management Book Series.

- 71. Publicly Available Specification 24 does not entirely replicate the Secured by Design requirements. But it is widely acknowledged amongst security experts that properly specified doors and windows contribute significantly more towards burglary reduction than the remaining elements of Secured by Design. This is achieved by making buildings more resistant to forcible entry.
- 72. It is therefore reasonable to expect the same security performance by Secured by Design and Publicly Available Specification 24. For the purpose of this Impact Assessment it is assumed:
  - physical security standards (Secured by Design and Publicly Available Specification 24) each reduce burglary by 20-50%.
  - this protection is to last for 25 years, the typical lifetime of a door or window.
  - the annual rate of burglaries is 24 per 1000 households, the current average for England and Wales.
  - the value of a burglary avoided is £4,248 in 2014 prices, as estimated by the Home Office<sup>8</sup>.
- 73. If crime reduction by Secured by Design and Publicly Available Specification 24 is 20-50%, the annual burglary cost reduction will be in the range of £20-51 per household. With a 25-year lifespan, these features are expected to bring forth a present value benefits between £336 and £840 per household.

# Social Impacts - Do Nothing

- 74. Under the counterfactual, all affordable homes would have to be built to Secured by Design. But power remains vested in local authorities in deciding whether or not to request private homes to be built to that standard. The steadily increasing take-up of Secured by Design in private new homes is evidenced by EC Harris's planning policy survey (See paragraphs 40-44 above and Adroit Economics Evidence Report paragraphs 6.6 6.9).
- 75. The present value benefits (£336-£840) are then multiplied across the number of new homes built to Secured by Design each year in the full 10-year appraisal period. This suggests the Do Nothing incurs a present value social benefits of £200-500 million. Compared to a present value build and process cost of £244 million, the resulting net present value benefits is between –£24 million and £277 million.
- 76. Therefore if the actual burglary reduction rate of Secured by Design is below 22%, the social benefits to occupants may be insufficient to cover the build and process cost. That would result in a net present value social cost for the Do Nothing.

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<sup>&</sup>lt;sup>8</sup> Brand, S. and Price, R. (2000). *Home Office Research Study 217: The economic and social costs of crime.* Research, Development and Statistics Directorate, Home Office.

#### Social impacts - Proposed Policy

- 77. The new Part Q standard is designed to ensure the most effective security elements of Secured by Design relating to windows and doors are retained. But Secured by Design will not be immediately replaced by Publicly Available Specification 24 under the proposed Policy. Instead, it will be phased out to 95%, 70% and 15% in 2015, 2016 and 2017 respectively. From 2018 onwards, all new homes will have been 'passported' to Publicly Available Specification 24.
- 78. As it is made mandatory, the total number of new homes built to Publicly Available Specification 24 and those built to Secured by Design before 2018 will surpass that number built to Secured By Design under the Counterfactual. If it is assumed that Publicly Available Specification 24 delivers that same burglary reduction then the proposed Policy incurs a present value social benefits of £390-975 million. Compared to a present value build, process and transition cost of £119 million (Tables 6 and 7), the proposal would achieve a net present value social benefits of between £271 million and £856 million.
- 79. Therefore even if the actual burglary reduction rates of Publicly Available Specification 24 and Secured by Design are only 20%, the social benefits would still sufficiently cover the build, process and transition costs. The social impact of the proposed Policy is more likely to result in a net present value benefit.
- 80. In a sensitivity test, Publicly Available Specification 24 in the proposed Policy is assumed to be slightly less effective. Say their burglary reduction rate is now in the range of 18-48% rather than 20-50%. The present value social benefits of the mandatory application of Part Q would then fall to between £354 million and £939 million. In net terms the benefit falls but remains substantial at between £235 million and £820 million.

# Wider Impacts

#### Small Firms impact

- 81. Introducing a single, simplified mandatory security standard should help to level the playing field and reduce hassle and process costs which can fall disproportionately on small firms.
- 82. The reduction in the number of and simplification of local standards is likely to have a disproportionately beneficial impact on smaller homebuilders which typically work on small sites. Differences can be especially large for process costs. For security, the per dwelling process cost for Secured by Design (developer plus recipient cost) is estimated in the EC Harris Cost Impacts Report Tables 5-8 as £16 for the large development but £167 for the small development. The equivalent costs for the new standard (Tables 33-36 in EC Harris Cost Impacts report) are £2.90 for the small development and £0.60 for the large development.
- 83. These figures illustrate how the savings, due to the simplification of the security standard, disproportionately benefit small developments and this small firms.

#### Competition

84. It is not considered that the proposal would have a negative impact on competition. Indeed, a degree of standardisation through creating a level playing field by making a simplified standard mandatory for all new homes may increase potential competition.