Title:
Changes to the building control system including introduction of risk-based service plans for local authorities and removal of the Warranty Link Rule

IA No: DCLG/0089

Lead department or agency:
Department for Communities and Local Government (DCLG)

Other departments or agencies:

Impact Assessment (IA)

Date: 17/12/2012

Stage: Final Proposal

Source of intervention: Domestic

Type of measure: Secondary legislation

Contact for enquiries: Ian Drummond or Sandra Simoni

Summary: Intervention and Options

RPC Opinion: Validated by RPC

Cost of Preferred (or more likely) Option				
Total Net Present Value	**Business Net Present Value**	**Net cost to business per year** (EANCB on 2009 prices)	**In scope of One-In, One-Out?**	**Measure qualifies as**
£21.7m	£18.2m	-£1.96m	Yes	OUT

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

Informal consultation with external partners has shown that the statutory building control regime is generally fit for purpose but improvements to make it more effective and less burdensome are possible and desirable. It is also possible to further level the playing field between Local Authorities and private sector Approved Inspectors which is another policy goal to improve competition. As the system is a statutory one Government intervention is needed to make the changes to the regulations.

What are the policy objectives and the intended effects?

To introduce changes to the building control system to reduce burdens and improve compliance with the Building Regulations. The proposals aim to reduce costs affecting building control bodies and those carrying out building work by removing, simplifying or improving processes. The effect would be a more effective and efficient building control regime. The intended effect of removing the Warranty Link Rule is to foster competition between local authorities and Approved Inspectors as for the rest of the buliding control market.

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

Option 0 – Do Nothing

Option 1 – Make changes to the building control system including introduction of service plans for local authorities and removal of the Warranty Link Rule

Informal consultation has shown overwhelming support from industry and others for retaining the current regulatory system of Building Regulations and building control but recognised that some improvements could be made to reduce burdens and improve compliance. This final impact assessment deals with two elements of the consultation proposals: (i) improving Local Authority building control processes; (ii) improving private sector Approved Inspector arrangements, including removing the Warranty Link Rule. In due course further impact assessments will be brought forward to deal with the remaining consultation proposals.

Will the policy be reviewed? It will be reviewed. **If applicable, set review date:** 06/2017

Does implementation go beyond minimum EU requirements?			N/A			
Are any of these organisations in scope? If Micros not exempted set out reason in Evidence Base.	**Micro** Yes	**< 20** Yes	**Small** Yes	**Medium** Yes	**Large** Yes	
What is the CO_2 equivalent change in greenhouse gas emissions? (Million tonnes CO_2 equivalent)			**Traded:** 0		**Non-traded:** 0	

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 the responsible Minister:  Date: 17 Dec.12

Summary: Analysis & Evidence

Policy Option 1

Description:

FULL ECONOMIC ASSESSMENT

Price Base Year 2012	PV Base Year 2013	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: 15.6	High: 52.5	Best Estimate: 21.7

COSTS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	0.1	1	0.04	**0.5**
High	0.4		0.10	**1.3**
Best Estimate	0.2		0.07	**0.9**

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

There will be transitional costs to local authorities to establish service plans (staff costs of £0.2m). Minor costs for Approved Inspectors of supplying insurance information to the Construction Industry Council have also been monetised (<£0.005m present value). Requiring local authorities to issue completion certificates might at a total PV cost of £0.13m, although they will already have charged customers for this. There is *a transfer payment* due to increasing competition – a £0.5m total PV cost to local authority building control but a benefit to consumers.

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

BENEFITS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	Optional		2.0	**16.9**
High	Optional		6.2	**53.0**
Best Estimate	0		2.6	**22.5**

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

The major saving comes from the removal of the Warranty Link Rule which is estimated to save £14.2m in reduced warranty costs and a further £1.5m in avoiding the reversion of work to the local authority which is a costly process. Changes to the Approved Inspector Regulations generate savings of £5m. There is a *transfer payment* effect of increased competition, a benefit to consumers of around £0.5m. The benefits of service plans are uncertain but will lead to fewer inspections in some cases (£1.4m).

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

Non-compliant work that is identified earlier as a result of service plan approach will be easier to rectify which would reduce costs for builders.. We expect householders to benefit from having a completion certificate in all cases and from clarity over the status of the certificate both when transaction property and when pursuing claims in the small claims court. Competition should encourage efficient behaviour in the building control market and could help to drive real resource savings.

Key assumptions/sensitivities/risks **Discount rate (%)** 3.5

The move to the proposed model service plans will have no impact on building regulations compliance. Since local authority building control already exercise discretion in choosing when to inspect and will continue to do so the quality of the building control process should remain the same. The monetised costs rely in part on estimates of the cost of staff time.

BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:			In scope of OIOO?	Measure qualifies as
Costs: -£0.0	Benefits: +£2.1	Net: +£2.1	Yes	OUT

Evidence Base (for summary sheets)

General Introduction

The Building Regulations 2010 are made under powers contained in the Building Act 1984, as amended. They set out what is controlled building work, typically the erection, extension or alteration of a building, or the provision of a controlled service or fitting, as well as in respect of certain changes of use (eg from a non-domestic building to a dwelling). They set minimum standards for the design and construction of buildings, primarily for the purposes of the health and safety of people, energy efficiency and accessibility. These standards are performance based, in terms of what is reasonable, adequate or appropriate. Statutory guidance on ways of complying with these technical requirements is set out in a series of 'Approved Documents', although it does not have to be followed provided the required level of performance can be achieved in a different way. Compliance with the regulations is the responsibility of the person carrying out the work.

The building control system helps to ensure that the required level of performance has been met. The role of building control, either the Local Authority or a private sector Approved Inspector, is to act as an independent third party check to help achieve compliance, which is usually carried out through plan checking and/or onsite inspections. Competition in the provision of building control was introduced in 1985 primarily to drive efficiency but also to enable those builders who operate across different local authority areas to be able to deal with a single building control provider if they wished to do so.

Although their functions are broadly the same (the key difference being that only Local Authorities can take formal legal enforcement action), the procedures for the two types of building control body differ due to the basis on which they operate. The Building Act places a statutory duty on Local Authorities to provide a building control service. Because of this, the Act and the supporting regulations prescribe a number of procedural matters e.g. a Local Authority must approve or reject a full plans application within a specified time limit. For Approved Inspectors, there is no statutory duty to provide a building control service; the relationship between the Approved Inspector and the person carrying out the work is governed by their contract. The statutory provisions in the Act and supporting regulations (primarily the Building (Approved Inspectors, etc) Regulations 2010) largely cover the approval and functions of Approved Inspectors and their relationship with Local Authorities.

It should be noted that the power to make Building Regulations was devolved to Wales from 31 December 2011 and is already devolved to Scotland and Northern Ireland. This Impact Assessment therefore only covers changes proposed for England.

Problem under consideration, rationale for intervention and policy objectives

In 2010 the Department informally invited external partners to submit ideas and evidence on possible changes to the Building Regulations and to the building control system that supports them. The emphasis was on areas where we could deregulate and/or reduce burdens, whilst delivering high levels of compliance. We also sought views on measures to help the Government meet its climate change commitments and to address known health and safety risks. As part of this exercise we also asked for views on possible alternative approaches, such as abolishing the building control system and relying on a system based on insurance or builder registration.

A key theme to emerge was that the building control system was considered to be generally fit for purpose but could benefit from some improvements to make it more efficient and less burdensome. There was also support for measures to improve compliance and to help level the playing field between public and private sector building control bodies. However, there was very little support for any fundamental changes to the regime, particularly as an alternative approach would be likely to have similar costs, as well as significant transitional costs of moving to a new system in the current economic climate.

This impact assessment therefore considers two changes to the building control system which were supported in the public consultation with the aim of reducing burdens, improving compliance and encouraging industry to take greater responsibility for its actions. The changes will reduce costs affecting both building control bodies and those carrying out building work by removing, simplifying or

improving processes. Removal of the Warranty Link Rule is being taken forward to remove a barrier to further competition in the building control market.

There are two sections in the impact assessment which each set out the costs and benefits of policies for improving local authority building control processes:

- improving Local Authority building control processes;
- improving private sector Approved Inspector arrangements, including removing the Warranty Link Rule;

Summary Table for 2013 Changes to the Building Control System Impact Assessment

	Present Value Cost	Present Value Benefit	Present Value OIOO cost to business	Present Value OIOO benefit to business
Local Authority Processes	£0.9m	£2.5m	£0m	£0m
Approved Inspectors	£0.005m	£19.6m	£0m	£18.2m
Total	**£0.9m**	**£22.5m**	**£0m**	**£18.2m**

Note: £0.5m PV benefit to consumers

LOCAL AUTHORITY BUILDING CONTROL PROCESSES: COMPLETION CERTIFICATES AND REMOVAL OF SOME OF THE STATUTORY NOTIFICATIONS REQUIRED AT CERTAIN STAGES OF WORK

Background

Completion certifcates

Completion certificates are issued by the Local Authority once it has been notified that the building work has been completed and, having taken all reasonable steps, it is satisfied that the work complies with the regulations. At present completion certificates are only required to be issued where the building is in scope of the Regulatory Reform (Fire Safety) Order 2005 (ie non-domestic buildings and blocks of flats) or, in respect of work on houses, where the applicant has requested a completion certificate at the time of submitting full plans. Where work is carried out on a house under a building notice or where a certificate was not requested at the time of submission of full plans there is no requirement for the Local Authority to issue a completion certificate.

Where an Approved Inspector is the building control body the equivalent is a final certificate which must be issued in all cases. Competent Person scheme members must issue a certificate of compliance for all work that they carry out under their scheme. These certificates have the same effect as a Local Authority completion certificate.

Completion certificates are evidence, but not conclusive proof, of compliance with the Building Regulations (ie they are not a guarantee of compliance) as building control is only a spot-checking process intended to help the person carrying out the work to comply.

Statutory notification stages

Where the Local Authority is providing the building control function, the regulations place a requirement on the person carrying out building work to notify the Local Authority that the work has reached certain stages in the building process. There are referred to as “statutory notifications” and trigger the Local Authority to decide whether it needs to inspect the work. The person carrying out the work will not know whether the Local Authority will wish to inspect, but should wait up to two days to allow it time to inspect should it decide to do so. There is no requirement on the Local Authority to inspect after each notification; whether to do so will be a matter of judgement for the Local Authority, generally based on the risk.

The nine current statutory notification stages are:

1. Intention to start work,
2. Intention to commence work which will cover up any excavation for a foundation
3. Intention to commence work which will cover up any foundation
4. Intention to commence work which will cover up any damp- proof course
5. Intention to commence work which will cover up any concrete or other material laid over a site
6. Intention to commence work which will cover up any drain or sewer to which the Regulations apply
7. Completion of work which involved laying, haunching or covering any drain or sewer in relation to where a requirement is imposed by the drainage and waste disposal requirement of the Regulations
8. Intention to occupy a building or part of a building before completion
9. Completion of the work.

Notification would of course be required only where the notification applied to work being carried out. For example, if the project involved no work on drains, stages 6 and 7 would not apply.

Problem under consideration

Completion certificates

As explained above, there is no statutory requirement for a Local Authority to issue a completion certificate where work is carried out under a building notice (which accounts for the vast majority of work carried out on houses) or for work on houses where the applicant chose to use the full plans route but did not request a completion certificate at the time the plans were submitted. Where such a request is not made it may be because the householder lacks the information on the benefits of a completion certificate, however, the choice of whether to use a building notice or full plans is driven by other factors such as the need to prepare detailed plans up front.

Where a completion certificate has not been issued simply because there is no requirement on the Local Authority to do so, evidence, from correspondence, enquiries etc, shows that problems can arise when selling the property, as it is not clear to the purchaser whether the building work complied with the regulations or not. The absence of a completion certificate can therefore result in a reduced purchase price, delays, or even loss of the sale. This has only become an issue in recent years as the introduction of Home Information Packs (HIPs) in 2007 placed a requirement for such certificates to be provided as part of the conveyancing process. Although the need for a HIP has since been removed, solicitors and purchasers still expect completion certificates in relation to building work to be provided during conveyancing.

In circumstances where there is no statutory entitlement to a completion certificate, building owners however can and frequently do request a certificate from the Local Authority either on completion of the work or at a later date (eg when a problem arises on sale of the property), Although Local Authorities are not required to do so, evidence from a recent survey by the Building Control Alliance suggests that completion certificates are issued by local authorities in the vast majority of cases where work complies, irrespective of whether there is a requirement on them to do so as they recognise that this is at minimal cost to them and brings benefits to the householder. However, there are a few cases (around 3%) where the Local Authorities do not do so because they have no specific incentive and a policy of not going beyond the statutory requirements, which can have a significant impact on the householder.

Conversely, where certificates have been issued and it later comes to light that the work did not in fact fully comply, the building owner may have difficulties in getting redress. There have been cases where the civil courts have dismissed claims by the building owner against the person who carried out the work on the basis that a certificate had been issued at the time of completion, even though it was later found that the work did not comply. This probably results from a misunderstanding by the civil courts of the effect of a completion certificate ie that it is not conclusive proof of compliance.

Statutory notifications

The current statutory notification stages are not relevant to all types of work. Where a person carrying out building work notifies the Local Authority of a statutory notification stage they are in most cases required to wait 2 days in case the Local Authority wishes to inspect. However, the person carrying out the work has no indication of whether the Local Authority will inspect. This delay may therefore be unnecessary and involve wasted time.

On the other hand, there are some stages in building work where the Local Authority might wish to be notified as it wishes to inspect, but no statutory notification stage is in place; for example, work involving energy efficiency, much of which tends to be carried out at later stages of the project. Many Local Authorities will currently ask to be notified when work has reached such stages as they operate a risk-based approach to inspections but these notifications do not have statutory force and some applicants do not therefore notify building control at the appropriate time. Many authorities are also already using a formal service/inspection plan approach but these cannot exclude the statutory notifications as they are required by law and therefore, where the Local Authority does not desire a notification at a statutory stage, this poses unnecessary burdens on the person carrying out the work.

Statutory notifications are not required when an Approved Inspector is the building control body. Instead the Approved Inspector will agree in their contract with the customer the stages where they wish to be notified on a risk assessed basis according to the type of building work.

Following the Future of Building Control review in 2008, which showed strong support for the development of a risk-based approach, the Department commissioned research to develop a risk assessment decision making tool for building control bodies[1]. The research showed that those building control bodies which piloted the tool found it a practical and useful approach as it took a reasonable amount of time to complete and owners and builders found the generation of service schedules a means of making decisions more transparent and better communicating notification needs. The tool produced as a result of this project published as guidance which building control bodies may adopt if they wish and includes an example of a service plan[2].

Rationale for intervention

Completion certificates

Although local authority building control do tend to issue completion certificates as a matter of course, making them mandatory will help householders in the small minority of cases where local authorities do not currently issue a completion certificate. Government intervention is necessary to ensure that completion certificates are issued in 100% of cases.

Amending the wording on completion certificates will ensure that a wider audience is able to understand the status of the completion certificate. Government intervention can help remove uncertainty about their status, at no cost, and this will help to ensure the most appropriate outcomes during proceedings in small claims courts.

Statutory notifications

The current statutory notification requirements do not address the stages which for most building projects would provide local authorities with the information needed to target inspections at the areas of greatest risk. Allowing local authorities on a project by project basis to decide when notifications are necessary would target areas of risk and remove areas where the risk was not significant.

Policy objective

The primary policy objective is to ensure that the procedural requirements of the Building Regulations are clear and simple, to achieve the maximum level of compliance with minimum burden on those carrying out the building work or on Local Authorities.

Results of the Public Consultation

96% of those with a view agreed that completion certificates should be made mandatory. The vast majority of respondents from local authority building control indicated that issue of a completion certificate was standard practice in their own and other authorities. Respondents from Approved Inspectors noted that it would mirror the requirements for them to issue a final certificate in all cases where work complied and provide consistency across the building control sector. Of those that objected this was either because they thought that imposing a timeframe was unreasonable or because ensuring compliance with all aspects of the Building Regulations might be very costly and difficult to ensure.

98% of those with a view agreed with the proposed changes to the wording to be included on the completion certificates, pointing out that this would be of benefit to the general public in understanding the status of the completion certificate (in particular that such a certificate is not a warranty or guarantee).

[1] DCLG, 2012 Consultation on Changes to the Buliding Regulations Section 4, 2012
http://www.communities.gov.uk/publications/planningandbuilding/brconsultationsection4

[2] Greenstreet Bernham, Risk Assessment Decision Making Tool for Local Authorities, 2012
http://www.communities.gov.uk/publications/planningandbuilding/riskassessmentguidance

The introduction of a service plan in place of certain statutory notifications was supported in the consultation by 82% of respondents with a view on the proposals. Respondents noted that service plans would 'create necessary local flexibility and allow for the appropriate use of risk assessment'. The NHBC fully supported 'the removal of the majority of statutory notifications as a positive move as this practice is out of touch with modern construction'. Other respondents noted that removing the statutory notifications would reduce the burden to industry. Of those that disagreed the primary reason was that removing statutory notification stages make it even more difficult to ensure builders adhered to the requirements to notify building control at particular stages of work, meaning work might not be inspected when fully uncovered.

Many respondents noted that local authorities already had approach similar to a service plan that took into account the risk attached to the building work in question.

Policy options considered

Option 0 – 'Do Nothing'

This option would fail to formalise the service plan arrangement which aims to deliver building inspections proportionate to the risk attached to the building project in question. This option is the counterfactual in this impact assessment.

Completion certificates would continue to be issued without an appropriate clarification of their status (except where local authorities voluntarily choose to accompany the certificate with a letter of explanation).

Issuance of a completion certificate, although standard practice and occurring in 90%+ of cases, would not be mandatory with potential adverse impacts on householders selling properties. This is particularly important as the general public might not be aware of the existence and the need for a completion certificate on alteration or extension works and might not ensure they have obtained a copy.

Option 1 - a) Make changes to the current building control processes to keep only commencement and completion (and occupation before completion for buildings subject to the Regulatory Reform (Fire Safety) Order) as named statutory notification stages and replace the others with a "service plan" where the Local Authority and the person carrying out the work will agree the stages to be notified on a risk assessment basis

b) Make issuance of a completion certificate a mandatory requirement and amend the standard wording on completion certificates to make clear their status

This is the chosen policy option. It will formalise service plan arrangements which have been adopted by many local authority building control bodies already and was supported in the consultation. It will help ensure that members of the public are aware of the status of completion certificates and will help to avoid any minority of cases where the absence of a completion certificate can delay or complicate a house purchase.

Additional research to inform the final stage impact assessment

To strengthen the analysis in the consultation stage impact assessment EC Harris in conjunction with PRP Architects were commissioned to review the proposals for completion certificates and for risk-assessed service plans.

On completion certificates the work involved interviews with six building control bodies, six estate agents and one legal firm. The results of the research suggested that probably 90-99% of projects were eventually accompanied by a completion certificate. The interviews with estate agents suggested that most purchasers would not be disturbed from their purchase by the absence of a completion certificate nor would they attempt to reduce the price of the sale. The legal firm thought that it was quite common for a survey or homebuyers report to question the building control status of an extension or alteration (perhaps 30% of transactions) although only 10% of buyers might push for insurance or a reduced purchase price on such a basis.

Interviews with building control bodies identified that a house purchase could be delayed by the absence of a completion certificate and building control might arrange inspections to issue a completion certificate (although this was identified as more likely where the work was not notified to building control). Absence of

minor certificates or electrical certificates seemed to be the most common reason that a completion certificate was not issued.

Work on statutory notification stages included a piece of work by PRP Architects comparing the number of inspections advised by the example risk-assessed inspection plans with the number of statutory notification stages and the actual number of inspections carried out in practice for a sample of different projects, across a number of building control bodies. Eleven projects were analysed, covering a range of different project types, with projects considered from two local authority building control departments and two Approved Inspectors (all in the South East of England). Although the results should be treated with caution given the small sample size they appear to support the view that following the recommendations of the published risk assessed service plan might slightly reduce the number of inspections compared to current practice. In particular savings might be possible for typical smaller projects such as extensions, with the service plan templates recommending one or two less inspections than currently undertaken.

Table 1 – Comparison of inspections conducted with the number of statutory notification stages and the number of inspections advised in proposed model service plans

Case	Project type	Actual number of Inspections Conducted	Statutory Notification Stages	Inspections advised in proposed model service plan (low)	Inspections advised in proposed model service plan (central)	Inspections advised in proposed model service plan (high)
1	Extension	10	9	6	7	8
2	Block of flats	24	9		30	
3	Block of flats	28	9		26	
4	Loft conversion	6	2	4	5	6
5	Extension	10	9	6	7	8
6	Extension	6	7	6	7	8
7	Extension	9	9	6	7	8
8	Commercial change of use	12	9		19	
9	Nursing home	85	9		35	
10	New housing estate	277	261	203	247	290
11	Public building	26	9		19	

EC Harris also analysed the potential savings from removing inspections at statutory notification stages; this work suggested that one inspection (namely the inspection of the damp proof caused) could be removed from small project and up to two inspections might be removed for a medium sized project. This would deliver a significant saving to the construction firm as it would help to avoid construction workers losing time on site whilst waiting for and attending inspections.

<u>Costs and benefits</u> of Policy Option 1

i. To make the issuing of completion certificates mandatory for Local Authorities, where they have been informed that the work has been completed and are satisfied it complies

<u>Costs</u>

A cost could arise where an inspection is needed in order for the Local Authority to be able to issue a completion certificate where one would not have ordinarily been carried out. However, Local Authority Building Control confirm that for the vast majority of building work a completion certificate is currently issued (even when there is no requirement to do so) and that the work would therefore have been inspected at a stage where the Local Authority could form a view on compliance. This was also confirmed by the respondents to the consultation none of whom indicated that it would generate a requirement for additional inspections. Respondents from local authority building control overwhelmingly indicated that it was already standard practice to issue a completion certificate. We therefore conclude that the number of additional inspections arising from making completion certificates mandatory would be very small.

Minor costs of printing and sending completion certificates where they would not have been otherwise would fall on the local authority, although local authorities indicated that this would already have formed part of the charge to the householder so doesn't represent an unfunded cost to them. Assuming 300,000 residential applications per year[3], of which estimates suggest 1-3% might not see the issuance of a completion certificate currently. Assuming that the sending out the completion certificate takes two minutes of a building control officer's time (ranging from £25/hour to £60/hour, midpoint of £43/hour) and printing and posting the completion certificate costs £1, this gives annual recurring cost ranging from £5,500 to £27,000 per annum with a central estimate of £14,600 per annum. This gives a present value cost over ten years of £0.23m.

Estimates of hourly costs are based on two sources, the EC Harris database of professional fees or building control charge out rates and the Annual Survey of Hours and Earnings 2011[4]. Hourly rates have been calculated for the central case by attaching a 50% weighting to wage rates from the EC Harris professional fees database (or average charges in the case of building control officers) and a 50% weight to wage rates derived from the Annual Survey of Hours and Earnings.

The EC Harris database has been used as a source of evidence on the cost for workers in the construction industry. This reflects the value by the market of a professional including wage, on-costs and other business costs to the organisation. This approach is widely used in the construction industry. However, there is a risk that this may overstate the cost savings. For instance in some situations, the saving may result in the professional being employed for fewer hours and delivering less than the full business cost savings assumed in the charge out rates. We have therefore also used the Standard Cost Model to estimate costs based upon the Annual Survey of Hours and Earnings (ASHE) plus an additional estimate of 30% for additional overheads such as pension contributions and national insurance contributions. It is our assessment that this approach underestimates typical benefits of time for professionals in the construction industry.

So for our central estimate we have assumed an hourly rate half way between the EC Harris industry estimate and the ASHE plus 30% approach[5]. We feel this estimate reasonably reflects that some time savings of key professionals have a high value reflected in the charge out rate for carrying out other priorities while in other situations the business cost saving might be more constrained.

In the low scenario hourly rates are based on the Annual Survey of Hours and Earnings and for the high scenario hourly wage rates have been based on the EC Harris professional fees database.

As it is already a requirement for the person carrying out the work to notify the Local Authority that the work has been completed, there is no additional cost for the person carrying out the work to trigger the issue of a completion certificate.

Benefits

The benefit would be to the householder who might not realise the importance of obtaining a completion certificate to demonstrate that building control inspections have been carried out. They would have fewer problems in trying to sell their house and would in many cases sell it at a higher price, or sooner, than if they did not have a completion certificate. However, the research conducted by EC Harris found that most estate agents and legal firms thought that the chance of a sale falling through because of a missing completion certificate would be extremely small. The completion certificate will also provide purchasers with greater confidence that they will not need to bear the cost of putting right any non-compliant work that might be discovered only after the purchase of a property.

The research carried out by EC Harris indicated that indemnity insurance where a completion certificate was not produced might cost around £100-£500 (average estimate £320). However, estate agents and the legal firm interviewed indicated an expectation that only rarely would a buyer insist on such insurance. Obtaining a completion certificate would remove the need for this insurance and reduce costs in such transactions.

ii. To amend the wording on the completion certificates, final certificates and competent person building regulations compliance certificates to reflect better the status of these certificates

[3] DCLG, Survey of Building Control, 2008, http://www.communities.gov.uk/publications/planningandbuilding/surveybuildingcontrolrpt

[4] ONS, ASHE, 2012, http://www.ons.gov.uk/ons/rel/ashe/annual-survey-of-hours-and-earnings/ashe-results-2011/ashe-statistical-bulletin-2011.htm

[5] Estimates from the ASHE have been up-rated by 30% to allow for pensions, national insurance contributions and other variable costs of labour employment (see Standard Cost Model, BERR, 2005, http://www.berr.gov.uk/files/file44503.pdf)

Costs

Costs to the Local Authority, Approved Inspector or competent person scheme operator would be negligible as there would be only a very minor one-off cost of adding a small amount of text to the existing certificate templates which are usually generated electronically on demand (so there is no cost in wasted out of date versions). Our estimate is that the total cost is less than £500 and so is treated as *de minimis* for this assessment.

Benefits

The benefit would be to the building owner. When bringing a claim in the civil courts they would be more likely to get compensation for the cost of putting right non-compliant work from the person who carried out the work if the courts better understood that the completion certificate was not a guarantee of compliance.

98% of respondents with a view supported this change and thought it would be helpful for the general public to have a clearer understanding of the status of a completion certificate.

iii. To keep only commencement, occupation before completion for buildings subject to the Regulatory Reform (Fire Safety) Order and completion as named statutory notification stages, and replace the others with a "service plan" where the Local Authority and the person carrying out the work will agree the stages to be notified on a risk assessment basis

Costs

Of those responding to the consultation who had a view on the costs and benefits presented in the consultation impact assessment 74% agreed with the estimates presented. Of those who disagreed, a number of respondents suggested that costs did not accurately reflect building control costs in London but it seems likely that this is mainly the result of building control bodies comparing their own costs with the national average figures in the IA and only raising this as an issue where they seemed too low.

Transition Costs

For the Local Authority:

From discussions with LABC, it seems very likely that Local Authorities would approach this matter by drawing up service plan templates for different sorts of buildings. The initial cost of drawing up templates will fall to the Local Authority, not to person carrying out the work. The template could be used, and modified where necessary, in respect of individual building applications. These cost estimates use an hourly rate of £43 per hour (£25/hr in the low scenario and £60/hr in the high scenario).

300 Local Authorities (based on the number of building control departments including those operating joint partnerships), the initial cost in drawing up service plan templates is estimated as follows:

- large block of flats would take 3 to 5 hours giving a total cost of **£22,500 – £90,000**
- for a house would be take 30 minutes to 1 hour giving a total cost of **£3,750 - £18,000**
- an office block or other commercial buildings would take 3 to 5 hours giving a total cost of **£22,500 - £90,000**
- In total this gives a total cost of drawing up service plans ranging from £48,750 to £198,000, with a midpoint of £123,375

It appears that some Local Authorities are already, in effect, operating a risk-based inspections system and service plan approach and so would bear little or no new costs as a result of this change. Furthermore, if LABC drew up model templates that could be adopted by individual Local Authorities, these costs could be greatly reduced, probably to little more than the cost to a single Local Authority as they would only have to adapt the templates.

There might also be familiarisation costs for building control officers who would wish to understand the service plan templates and the changes to the process in order to explain the implications for clients. For 3,300 local authority building control officers[6] we estimate that this might take 30-60 minutes per person for familiarisation, giving a further transition cost of £41,250 to £198,000.

This gives a central estimate for one-off costs to Local Authorities (drawing up service plans and familiarisation costs) of **£243,000** (£123,375 for establishing service plans and £119,625 in familiarisation costs) with a total range of £90,000 to £396,000)

Ongoing Costs

For the person/business carrying out the work:

Local authorities are already required to estimate the amount of time they expect to spend on a job in order to set the building control charge and so are already making an assessment of the number of inspections they expect to carry out. The additional cost in expanding this to cover the stages at which the inspections will be carried out using the templates described above would therefore be minimal. As this is part of dealing with the application, the costs of this process would be borne by the person carrying out the building work as part of the building control charge itself. They are estimated as follows:

- a large block of flats is estimated to take 15-30 minutes of the Local Authority's time at £60 per hour and therefore be charged to the client as between **£15 - £30 per building application.**
- a house is estimated to take 15 minutes of Local Authority's time at £60 per hour and therefore be charged to the client as approximately **£15 per building application**
- an office block or other commercial building is estimated to take 15 -30 minutes of a Local Authority's time at £60 per hour and therefore be charged to the client as **between £15-£30 per building application.**

There will also be a cost on the person carrying out the work in receiving, reading and agreeing a service plan. For most standard projects this will be very similar to current process and any additional cost will be negligible; most service plans for typical projects will be produced according to standard templates and therefore should be thought of as a transition cost rather than an ongoing cost.

It is unlikely that Local Authorities will be able to draw up templates for service plans for many industrial buildings, as they differ so much one from another. It is likely that the cost of individual service plans would be similar to the cost of drawing up the initial templates, ie £180-£300 per application although this may be offset by the time currently spent on calculating the building control charge. For more complex projects a service plan approach is effectively already governing the stages at which inspection takes place so the cost difference compared to current practice will be small.

LABC do not anticipate that the changes will result in a significant decrease in the number of notifications for stages of work over what is currently required by the statutory notification system. However, research into the potential for greater use of risk assessment when determining building control inspections suggests that the number of inspections based on risk should fall. As notifications in a service plan should be triggered by risk-based inspections they too should be fewer than at present. Even where the number of inspections remains the same as at present, the changes may mean that for some work the notifications will be made at different stages of the building work than required under the current statutory notifications.

If the number of notifications required under a service plan is the same as or fewer than under the present statutory notification system there would be no additional cost (and could be a saving). In any event, almost all notifications are now made by e-mail, text or telephone so such costs are minimal. Therefore we do not believe there are any ongoing costs relating to this part of the policy.

Benefits

[6] Figure of 3,500 has been provided by LABC and adjusted to reflect the fact that this also includes Welsh building control authorities

Moving to a risk-based system of inspection and notification will in some cases mean that there are fewer notifications required and fewer inspections carried out. There would be a decrease in building control charges for these reasons. Based on research conducted by EC Harris and PRP Architects we have estimated the potential for the move to risk based inspection service plans to deliver savings although there remains significant uncertainty.

Where there are fewer inspections there would be a saving of 30-60 minutes for each inspection not carried out. At an hourly rate of £43/hr this is a saving of £32 on average.

Business would perceive this benefit at £60/hr as this is the average cost that building control inspections are charged at (this reflects the fact that the building control body must recover all the costs of running the building control service over the year – i.e. is the average cost of an inspection rather than the marginal cost).

To understand further the impact of service plans PRP Architects and EC Harris were commissioned to review the proposals. PRP reviewed a sample of 11 real-life projects, comparing the number of notifications recommended in the example service plans with the number of statutory notifications and the actual number of inspections that had been carried out by building control. This work suggests that following the risk-based assessment inspection programme in full might save one inspection on small projects such as extensions or loft conversions. However, how much of this saving might be realisable is uncertain and depends on current practice across local authority building control - the extent to which they are already following a risk-assessment process as well as how they decide to implement the new guidance on service plans. Local authority building control departments already have flexibility and take a risk-based approach to the number of inspections they deem necessary to verify compliance.

EC Harris have attempted to cost the delay to works by looking at the statutory notification processes and working out which stages might not be required in the service plan approach. This indicates that there could be savings of one inspection of the damp proof course, which is perceived as low risk or could be inspected alongside other stages. To the business carrying out the work this would save the cost of the inspection (1 hour @ £60/hr) and one admin unit (of one hour at £25/hour[7]) as well as potentially helping to avoid delay on site. The delay is assumed to affect two skilled manual labourers (£19[8]/hr) for four hours and its avoidance therefore delivers a saving of £152. The total saving is there estimated to be £237 per project.

For medium-sized projects EC Harris estimate that the savings could be larger, potentially two inspections (2 hours @ £60/hr) and an avoided delay of eight hours affecting four workers (saving £608), a total saving of £728.

There might potentially be some savings for larger projects as well, although because such developments will vary so considerably it has not been possible to estimate the magnitude of this impact. Since intermediate inspections already form the majority of inspections for large scale projects, current practice is probably already similar to an approach following the service plan templates. These figures were provided are not included in our assessment of the benefits due to the uncertainly of the effects.

Therefore both the case study review performed by PRP Architects and the work by EC Harris consistently suggest that risk-assessed service plans have the potential to deliver savings for small projects. Based on the results of the survey of building control we estimate that there might be around 150,000 loft conversions and extensions per year[9]. Should each project require one less minor inspection as a result of the change the total benefit to business would range from £1.88m[10] to £4.5m[11], with a midpoint of £3.23m[12]. However, some building control bodies will already be following a service plan approach or may make no material changes to their current approach following the formal introduction of service plans, so the extent to which this saving is realisable is uncertain. The results of the public consultation suggested that most local authority building control bodies already operate a risk-based system of inspections, receiving all statutory notifications but choosing whether to inspect at these

[7] ONS, ASHE, 2012, http://www.ons.gov.uk/ons/rel/ashe/annual-survey-of-hours-and-earnings/ashe-results-2011/ashe-statistical-bulletin-2011.htm

[8] Average of estimates from the Annual Survey of Hours and Earnings, uprated 30%, and estimates from the EC Harris fees database.

[9] DCLG, Survey of Building Control, 2008, http://www.communities.gov.uk/publications/planningandbuilding/surveybuildingcontrolrpt. Results in the survey have been scaled up for non-respondents and adjusted to give an estimate for England only rather than England and Wales.

[10] Using a low wage rate of £25 per hour using the Annual Survey of Hours and Earnings, uprated 30%

[11] Based on the average building control fee of £60/hr as quoted in CIPFA guidance

[12] Based on an hourly wage of £43, which is the midpoint of the 2 wage rates.

stages, and usually agreeing at one inspection at what point they wish to be notified in order to inspect again. As a result, although we think there is potential in some cases to reduce the cost of inspection programme by following the risk-assessed service plan, in many cases current practice will already reflect the local authority's view of the risk of the project and so there may not be a reduction in the number of visits. There remains uncertainty due to varying practice across building control bodies so we have taken a cautious estimate for the central case by using a range for the wage rate. To be cautious we have not included this as part of the calculations for the EANCB OUT to business.

Some local authorities expressed a preference for continuing with the current statutory notification stages, since confusion between the practice of different local authority building control bodies could be challenging for small builders. However, we believe that since smaller projects would follow a fairly standard service plan and LABC are likely to develop model service plans, this risk can be mitigated.

Removing all statutory notification stages except commencement, occupation for buildings subject to the Fire Safety RRO and completion of work would also have the effect of removing the statutory up to 2 day period which the notification must be made before starting the type of work. Local authorities will be able to set any advance notification period relevant to the work in the service plan. This will mean that in some cases the person carrying out the work will not lose up to 2 days of construction time during which they currently have to wait in case the Local Authority wishes to inspect (but often does not). This will help to reduce construction time and construction costs on many building projects, particularly where the nature of the project is such that workers cannot be redeployed to other tasks during the waiting period.

As service plan will contain notifications at those stages where Local Authorities consider that the risk justifies inspections rather than at fixed points, it is likely that building control will pick up non-compliant work earlier and more often than at present. The earlier non-compliant work is identified by the Local Authority, the less expensive it is likely to be to put right for the person carrying out the work. Overall it is likely to give a benefit of a higher level of compliance with the Building Regulations with buildings which perform better and have lower operating costs, and will therefore have a higher rental or sale value.

In the low scenario we have assumed that *all* local authorities are currently operating inspection schedules with a similar profile to the proposed model service plans and there will be no reduction in the number of inspections.

To illustrate the upper end magnitude of the potential savings the high scenario assumes that one minor inspection taking 30 minutes is saved for the 150,000 minor extension and conversion type projects per annum.[13] Again, the wage rate is based on two sources, the EC Harris database of professional fees or building control charge out rates and the Annual Survey of Hours and Earnings 2011[14]. Hourly rates have been calculated for the central case by attaching a 50% weighting to wage rates from the EC Harris professional fees database (or average charges in the case of building control officers) and a 50% weight to wage rates derived from the Annual Survey of Hours and Earnings.

This high estimate is unlikely in practice so in the central scenario we have assumed that in 95% of cases no savings are achieved since inspections are already being carried out based on an assessment of the risk but there is scope for the proposed model service plans to ensure efficient practice.

Table 2 - Summary table of costs and benefits

Costs	low	central	high
Transition cost	£396,000	£243,000	£90,000
Annual cost	£27,000	£14,600	£5,500
PV Cost (10 years)	£628,408	£368,672	£137,342

Benefits	low	central	high
Annual Benefits	£0	£161,250	£3,225,000
PV Benefit (10 years)	£0	£1,387,989	£27,759,789

NPV	low	central	high
NPV (10 years)	-£628,408	£1,019,317	£27,622,447

[13] 150,000 * £43 * 0.5 = £3.225,000

[14] ONS, ASHE, 2012, http://www.ons.gov.uk/ons/rel/ashe/annual-survey-of-hours-and-earnings/ashe-results-2011/ashe-statistical-bulletin-2011.htm

APPROVED INSPECTOR REGULATIONS AND THE REMOVAL OF THE WARRANTY LINK RULE

Background

Approved Inspector Regulations

The Building (Approved Inspectors etc) Regulations 2010 supplement the Building Regulations and expand upon many of the procedural requirements for Approved Inspectors covered in the Building Act. They largely govern the relationship between Approved Inspectors and Local Authorities (the relationship between an Approved Inspector and their client is covered by their contractual arrangements). The Approved Inspector Regulations also set out the functions of Approved Inspectors i.e. to take all reasonable steps to satisfy themselves within the limits of their professional care that the requirements of the building regulations have been complied with.

Warranty Link Rule

Until 2005 only Local Authorities and National House Building Council (an Approved Inspector) were allowed to undertake the building control function for new homes intended for private sale or rent. All other Approved Inspectors were limited to dealing with non-domestic work. This was because of concerns that, if there were issues of non-compliance, a homeowner would be unable to make a claim against the Approved Inspector's professional indemnity insurance due to the need to prove negligence. NHBC was included because it only undertook building control work where its own new home warranty was in place, thus providing a no-fault redress for homeowners and it had been providing such warranties for around 20 years, giving them experience of issues relating to construction of dwellings.

When the new home market was opened up to all Approved Inspectors in 2005, it was felt that a similar level of protection was required to maintain confidence in the building control system as other Approved Inspectors had no previous experience of operating in the domestic sector. The Warranty Link Rule was therefore introduced, which requires that before an Approved Inspector can take responsibility for building control in respect of building work consisting of the construction of new build dwellings (i.e. houses or flats) or the conversion of any building in whole or in part to houses or flats (e.g. a barn conversion) and the dwellings are for private sale or rent a warranty must be in place under one of the Designated New Home Warranty Schemes approved by the Department.

Problem under Consideration

Approved Inspector Regulations

As part of the 2013 Building Regulations review, the Department proposes to make changes to the building control system processes to improve the existing system to both reduce burdens and improve compliance where possible and to encourage industry to take greater responsibility for their actions. We have considered a number of suggested changes to the Approved Inspector regulations to reduce the burdens associated with them and have identified the following minor changes that would reduce burdens both on Approved Inspectors and Local Authorities:

i. remove the need for Approved Inspectors to send a copy of their approval certificate and certificate of insurance to the Local Authority with every Initial Notice (which can cover multiple units, often covering hundreds of units). Instead the approval body will hold this information on an existing publicly-accessible register;

ii. combine the two classes (individual person and corporate) of Approved Inspectors; and

iii. ensure all the definitions are up-to-date and make a few clarifications for ease of interpretation.

Warranty Link Rule

Following concerns over the way the Warranty Link Rule was operating, a project was set up to consider the policy rationale for the Warranty Link Rule and whether the specific criteria were appropriate,

particularly the one for contaminated land[15]. The research found that Approved Inspectors do not appear to be the subject of more complaints than Local Authority building control which suggests that the concerns which led to the Warranty Link Rule being put in place have not been realised in practice. The research also found that Approved Inspectors have been discouraged from carrying out the building control function on new homes for private sale and rent due to the additional burdens associated with the Warranty Link Rule.

The research suggests that the Warranty Link Rule is no longer needed, creates an unnecessary burden and acts as a barrier for Approved Inspectors to take on business. However, the research also found that there are a number of complex issues primarily in respect of the contaminated land criterion which would need to be addressed if the Warranty Link Rule were to be retained, which could increase the costs of the warranties.

Rationale for intervention

To provide competition and choice to consumers the Building Control function can be carried out by either an Approved Inspector or Local Authority building control.

If the Approved Inspector Regulations are not revised they will continue to impose extra unnecessary burdens on both Approved Inspectors and Local Authorities in cases where it is necessary for work to revert to the local authority because the Warranty Link Rule could not be satisfied. .

If we do not remove the Warranty Link Rule, Approved Inspectors will continue to be discouraged from entering the market for new homes for private sale and rent, thereby distorting competition and affecting consumer choice. The Department would also need to revise the Warranty Link Rule contaminated land criterion and designated warranty approval process which would increase costs on both the warranty providers and house builders.

Although warranties are generally considered to be beneficial to homeowners it is not Government policy to require them to be provided in all cases. There has been no provision for them to be provided where a Local Authority is the building control body.

Policy objective

To reduce unnecessary burdens on Building Control Bodies and improve compliance with Building Regulations where possible and to encourage industry to take greater responsibility for their actions.

To level the playing field between Local Authorities and Approved Inspectors.

Description of options considered (including do nothing)

We have considered two options:

Option 0 - do nothing

Option 1 - make minor changes to the Approved Inspectors Regulations and remove the Warranty Link Rule

Option 0 would mean that the problems and unnecessary burdens associated with the current Approved Inspectors processes as described earlier would remain. There are no additional costs or benefits.

Option 1 is the chosen policy option. It addresses the problems with the current processes and removes burdens without any substantial additional costs.

Results of the Consultation

[15] DCLG, Research into the operation of the Warranty Link Rule, 2012, available at http://www.communities.gov.uk/publications/planningandbuilding/warrantylinkrulereport

The amendments to the Approved Inspector Regulations had widespread support from respondents, with 89% of those who had a view in favour of taking forward the proposed changes to the Approved Inspector Regulations.

Support for removing the Warranty Link Rule was more tempered, with 65% of those with a view in favour of the proposals. Significantly some local authority building control officers thought that the proposal would dilute the quality of building control provided, although in many cases it was difficult to separate criticism of the policy change from general opposition to private sector building control.

The majority of respondents did not have a view on the estimated monetised costs and benefits in the consultation stage impact assessment; of those that did 79% agreed with the estimates made in the consultation stage impact assessment. No further evidence was submitted in the consultation that could be used to refine the estimates.

Additional research informing this final stage impact assessment

In order to further the evidence base EC Harris were asked to address two questions about the Warranty Link Rule; how much work reverts to the local authority because of the Warranty Link Rule after construction has started and how much work is lost from Approved Inspectors to local authorities in general as a result of the rule. This work has helped to refine the estimated benefits of removing the Warranty Link Rule and is discussed in more detail below.

Monetised and non-monetised costs and benefits of each option

Approved Inspector Regulations

It is estimated that the following costs and benefits will arise when minor changes to the Approved Inspector Regulations are introduced:

Costs

It is proposed that Approved Inspectors should no longer be required to send a copy of their insurance certificate and certificate of approval to the Local Authority with every Initial Notice. Instead the Construction Industry Council (CIC), the body that approves Approved Inspectors, would add the insurance information to an existing publicly accessible website.

There will be an initial set up cost to the CIC for expanding their website to include the insurance certificates and to uploading them onto the site. We estimate that establishing this will take one 7.5 hour day, which at an hourly rate of £43[16], gives a total transitional cost of **£323.**

There will also be a nominal cost for updating the insurance details on an annual basis. We estimate that this would either be included as part of the normal web management or at a nominal charge of about £3.58 per annum, on the basis of it taking 5 minutes at £43 per hour. For 70 Approved Inspectors the total ongoing cost would therefore be around £251 per annum. There would be no cost with respect to the approval information as CIC already record this information on their website.

We anticipate that CIC would recover their costs through Approved Inspectors approval/re-approval fees (re-approval is every 5 years).

There will also be a cost to Approved Inspectors of sending their insurance certificate by email to CIC each year. We estimate it will take each Approved Inspector 5 minutes to send their certificate. This gives a total time of around 5.8 hours at £43[17] per hour (assuming the same hourly rate for Approved Inspectors as for Local Authority building control) which gives a cost of around £251 per annum.

[16] Estimated based on attaching a 50% weight to estimates from the Annual Survey of Hours and Earnings plus 30%, (£25/hr), and a 50% weight to the charge out rate (£60/hr)

[17] Estimated based on attaching a 50% weight to estimates from the Annual Survey of Hours and Earnings, plus 30%, (£25/hr) and a 50% weight to the charge out rate for building control services (£60/hr)

The estimated total annual cost of **£502** gives a present value of £4,321 over 10 years. When added to the transition cost above, this gives a total monetised present value cost of **£4,644**.

There will be no need for Approved Inspectors to send a copy of their Approval certificate to CIC as the information originates with CIC.

There will be a nominal administrative cost to Local Authorities for checking the validity of Approved Inspectors approval and insurance certificates on the CIC's website if they chose to do so. However, from information provided by LABC, we anticipate this will only occur in a few cases each year e.g. where a new Approved Inspector is involved or concerns have arisen and so costs are likely to be negligible.

Benefits

There is a saving to Approved Inspectors of not having to send their insurance and approval certificates to the Local Authority with each Initial Notice and subsequent final notice. There are approximately 40,000 Initial Notices per annum (based on the Survey of Building Control Bodies for 2006/07 published in March 2008). We estimate that 70 % (28,000 approx) of Initial Notices are sent by email and 30% (12,000 approx) are sent in hard copy by post because not all Local Authorities elect to receive Initial Notices electronically. The same would apply to final certificates.

On the assumption that attaching both the insurance certificate and approval certificate to the initial notice takes five minutes of an Approved Inspector's time, whether as electronic attachments to an email as paper put into an envelope, there would be a saving of approximately 3,335 hours. Furthermore, they are also required to attach this information to a final certificate, giving a total of 6,670 hours. At £43 per hour this would save Approved Inspectors around £286,810 per annum (range £166,750 to 400,200).

For Initial Notices and final certificates sent in hard copy by post there will also be a saving to the Approved Inspector in not having to photocopy/print off the insurance and approval certificates to send with the Initial Notice. We estimate a saving of 10p per initial notice or final certificate which would save a further £2,400 per annum.

As the insurance certificates and approval certificates would in almost all cases have been filed together with the Initial Notice or final certificate to which they were attached (either electronically or as paper) we do not think that there will be any quantifiable savings to Local Authorities from no longer receiving them. However, there will be a saving from no longer having to record the Approved Inspectors' insurers name and address information on to the register kept under section 56 of the Building Act. If this saved Local Authorities 5 mins per Initial Notice and final certificate, this would yield an annual saving to LA's of £268,810 per annum (range £166,750 to 400,200)

There are no perceived benefits in having the historic split of two classes of Approved Inspector: individual and corporate which has on some occasions caused confusion. There would therefore be minor administrative benefits of consistency to Approved Inspectors and their approval body, CIC, in combining the two classes of Approved Inspectors. Only one approval form would be needed instead of the current two and all Approved Inspectors would be required to provide the same information. There could be some very small administrative savings from this change.

The Department is also aware of instances where users of the Approved Inspectors Regulations have found some of the definitions and other provisions to be unclear. As removal of the need to accompany an Initial Notice with an insurance certificate and the combination of the two classes of Approved Inspectors will require amendments to the Regulations we would use the opportunity to clarify the unclear provisions. The time taken for Approved Inspectors and other to use the legislation will be less and compliance with the regulations should improve due to better understanding of what is required.

An annual benefit of £576,020 per annum (range £335,900 to £802,800) gives a present value benefit for the changes to the Approved Inspector regulations over 10 years of **£4.6m**.

Warranty Link Rule

It is estimated that the following costs and benefits will arise if we remove the Warranty Link Rule:

Benefits

Problems arise where the intended use of the dwellings under construction or conversion changes from one that does not require a warranty (for example, student accommodation or social or public sector rental) to dwellings for sale or private rental which therefore do require a warranty. Similar problems arise when a warranty provider decides it cannot issue a warranty once construction has begun. As no warranty is in place the Approved Inspector cannot continue as the building control body and the building control function must revert to the Local Authority.

This process costs loss of business to the Approved Inspector, is a difficult situation for the Local Authority who have to take over the building control function part way through the job and may require work to be uncovered so they can certify it as compliant, and results in inconvenience and potentially delays and increased costs to the developer/building owner. Abolishing the Warranty Link Rule would remove these problems.

According to the work performed by EC Harris, the removal of the Warranty Link Rule could lead to a saving of around £975-£2,650 for each project that would currently have to revert to the local authority because of the Warranty Link Rule during the construction process. These cost estimates take into account the additional administrative cost, the additional building control fees (since the Approved Inspector and the local authority would both have to be paid), on-site construction delay and, for complex works, costs associated with uncovering work for inspection and then making good following completion of the inspection. Interviews with local authority building control bodies and Approved Inspectors conducted as part of the research suggested that such instances are extremely rare, perhaps 0.2% of all residential projects currently undertaken by Approved Inspectors. This leads to an estimated cost to builders from delays arising as a result of work reverting to the local authority because of the Warranty Link Rule of around £0.1m - £0.25m per year[18].

It is also estimated that every year a number of jobs that could have been dealt with by an Approved Inspector are lost to Local Authorities because the housebuilder does not want to pay for the provision of a warranty or the housebuilder does not meet all the requirements of the warranty provider.

We estimated at consultation that there are approximately 15,000 units per annum (range of 10,000 to 20,000 to reflect uncertainty) that go to the Local Authority either at the start of the job or during construction. This estimate was corroborated by EC Harris in their research. They estimated around 17,000 units potentially lost to Approved Inspectors as a result of the Warranty Link Rule, based on consultation with Approved Inspectors and local authority building control bodies to estimate that around 20% of properties developed each year, and applying this proportion to the approximate number of dwellings built per annum as per DCLG statistics (85,000)[19]. We use the 15,000 estimate below.

Figures from Approved Inspectors suggest that Approved Inspectors knowingly lose business worth approx £5.7m pa to Local Authorities (from housebuilders who have initially approached an Approved Inspector and subsequently elected to use the Local Authority). This figure could well be significantly higher in practice as housebuilders who are aware of the Warranty Link Rule may never approach an Approved Inspector at all.

A loss of business for an Approved Inspector is a gain for the Local Authority. However, removing the Warranty Rule would level the playing field between Local Authorities and Approved Inspectors and could improve competition. As well as providing more choice for customers it could potentially result in lower Building Control charges. We estimate that if the charges dropped by 1% on the 15,000 units (range: £10,000 to £20,000) there would be a saving to consumers of around £57,000 per annum (range

[18] Assumes 120,000 projects taken on by Approved Inspectors based on figures from the ACAI (Association of Consultant Approved Inspectors). 40% of this number (48,000) are assumed to be residential projects based on the results of the survey of building control http://www.communities.gov.uk/publications/planningandbuilding/surveybuildingcontrolrpt

[19] DCLG statistics, live tables on house bulding, http://www.communities.gov.uk/housing/housingresearch/housingstatistics/housingstatisticsby/housebuilding/livetables/

of £38,000 to £76,000), assuming an average building control charge of £380 per project. The EC Harris report also indicated that savings might be possible and suggested 5% could be achievable. To err on the side of caution we have used a 1% reduction in fees across the projects identified as currently only open to local authority building control. We have recorded this as a transfer payment, a cost to local authorities who lose revenue and a gain to consumers who face lower prices. To the extent that competition encourages efficient behaviour there will also be some real resource savings, which have not been monetised.

There would also be a benefit to the housebuilder and building owner in the reduction in warranty costs. The EC Harris report estimates that the average cost of a new home warranty from a designated warranty provider is £750 based on industry experience and this is in line with the estimate made at consultation stage. In most cases a new home warranty will be required to satisfy market-driven purposes, such as the Council of Mortgage Lenders borrowing requirements, although we estimate that there are approximately 2,200 units (range of 2,000 to 2,400)[20] built per annum that would fall in to the category of not needing a warranty for any other purpose than the Warranty Link Rule. Presumably in such cases the builder prefers to pay for the warranty and the cost of building control services provided by an Approved Inspector rather than pay the local authority building control fee. Removing the Warranty Link Rule would therefore produce a potential benefit in these cases to the housebuilders or building owners of **£1.65m** per annum (range of £1.5m to £1.8m).

Removing the Warranty Link Rule will also bring savings to warranty providers and house builders from not having to bring their policies in line with changes that would be necessary for DCLG to make to the Warranty Link Rule contaminated land criterion. It would also give more choice for consumers as they would be able to choose from a wider range of warranties not just the designated warranty schemes. Warranties would also be more flexible to meet the specific needs of particular customers/sites (e.g. providing a higher level of cover on sites where there are known contamination risks).

Costs

There are no direct costs in removing the Warranty Link Rule. However, it does mean more work may go to Approved Inspectors and less to Local Authorities so there may be a distributional effect. Non-price competition, for example through the customer service experience, will be important alongside price competition in determining the extent of this effect. The benefits of increasing competition to consumers, estimated above as £57,000 per annum (range £38,000 to £76,000), are a transfer payment from building control providers to consumers so are counted as here as a cost to building control providers.

Summary Table of Costs and Benefits

Table 3 - Summary table of costs and benefits: amendments to the Approved Inspector Regulations and removal of the Warranty Link Rule

Costs	low	central	high
Transition cost	£323	£323	£323
Annual cost	£38,502	£57,502	£76,502
PV Cost (10 years)	**£331,736**	**£495,282**	**£658,828**
Benefits	low	central	high
Approved Inspector Regulations	£335,900	£576,020	£802,800
Savings on projects no longer reverting to the local authority	£93,600	£174,000	£254,400
Cost reduction as a result of greater competition	£38,000	£57,000	£76,000
Warranty savings	£1,500,000	£1,650,000	£1,800,000
Annual total	**£1,967,500**	**£2,457,020**	**£2,933,200**
PV Benefit (10 years)	**£16,935,623**	**£21,149,258**	**£25,248,066**

[20] Based on 2010 figures provided by the Association of Consultant Approved Inspectors)

NPV	low	central	high
NPV	£16,603,888	£20,653,976	£24,589,238

OVERALL ASSESSMENT OF POLICY

Collecting the changes to the local authority building control process and the changes affecting Approved Inspectors the overall net benefit of the policy is estimated to be **£21.7m** over ten years.

Table 4 - Summary table of costs and benefits

Costs	low	central	high
Transition cost	£90,323	£243,323	£396,323
Annual cost	£44,002	£72,102	£103,502
PV Cost (10 years)	£469,078	£863,954	£1,287,235

Benefits	low	central	high
Transition benefit	£0	£0	£0
Annual total	£1,967,500	£2,618,270	£6,158,200
PV Benefit (10 years)	£16,935,623	£22,537,247	£53,007,855

NPV	low	central	high
NPV	£15,648,388	£21,673,293	£52,538,777

Direct costs and benefits to business (following 'One-In, One-Out' methodology)

The majority of the benefits of the changes outlined will be to business. Costs and benefits falling on local authority building control changes only affect public bodies so have not been counted in this section of the assessment. Moving to risk based service plans has the ultimate aim of reducing the building control charges faced by business for low risk projects. As discussed in the text the extent that savings are realisable in practice is uncertain due to varying approaches taken by local authorities so we have not assumed any benefit to business from this element of the proposals in these estimates.

The costs of the Approved Inspector Regulations changes have been included and the benefits of these changes and the removal of the Warranty Link Rule included, giving a total Equivalent Annual Net Cost to Business (EANCB) of -£1.96m in 2009 prices[21].

Table 5 – Direct cost s and benefits to business

Benefits	central
Appraisal period (years)	10
Direct costs to business (PV)	£4,644
Present benefit to business (PV, 10 years)	£18,189,849
Net present benefit to business (PV, 10 years)	£18,185,206
AE Cost (£2012)	£539
AE Benefit (£2012)	£2,113,210
Annual Equivalent Net Cost to Business (£2012)	£2,112,671
Annual Equivalent Net Cost to Business (£2009)	£1,958,446

[21] Based on a GDP deflator estimate of 0.927.

Direct costs and benefits to homebuilders

The costs and benefits of the changes to the Approved Inspector Regulations will be to Approved Inspectors rather than to homebuilders and are excluded. The majority of the benefits of removing the Warranty Link Rule will be to homebuilders, totalling £1.7 million in 2009 prices.

Wider impacts

Economic

The main groups affected by the proposals will be building control bodies, builders/installers and consumers.

Small and Micro businesses

The proposals in this IA will apply equally to small and micro-businesses. Current statistics show that micro-businesses make up approximately 90% of the builder/installer sector. A few of the private sector Approved Inspectors are also micro-businesses.

The changes detailed within this IA are deregulatory in respect of small and micro-businesses with insignificant transitional costs. Both builders/installers and Approved Inspectors will benefit from the increased opportunities provided through the removal of the Warranty Link Rule.

Competition

With respect to building control bodies it is expected that the proposals will help to level the playing field between Local Authorities and Approved Inspectors. By opening up more of the market to Approved Inspectors competition should help to foster lower prices and better service for consumers.

Social

An Equality Impact Assessment Initial Screening has been carried out and no impacts on any of the affected groups have been identified.

Environmental

To the extent that the policies help to improve compliance with the Building Regulations there may be beneficial impacts on energy and water efficiency provisions of the Building Regulations with positive environmental impacts.

Summary and preferred options with description of implementation plan

The chosen policy option (option 1) will be implemented from January 2013 for the amendments to the Approved Inspector Regulations including removal of the Warranty Link Rule and local authority completion certificates and from April 2013 for the local authority statutory notifications.

Title: The Building, Approved Inspectors and Charges (Amendment) Regulations 2012: Authorisation of New Extended Competent Person Schemes **IA No:** DCLG 12019 **Lead department or agency:** Communities and Local Government **Other departments or agencies:**	**Impact Assessment (IA)** **Date:** 17/12/2012 **Stage:** Final **Source of intervention:** Domestic **Type of measure:** Secondary Legislation **Contact for enquiries:** Anthea Nicholson or Ian Drummond

Summary: Intervention and Options

RPC Opinion: IA With RPC awaiting validation.

Cost of Preferred (or more likely) Option				
Total Net Present Value	**Business Net Present Value**	**Net cost to business per year** (EANCB on 2009 prices)	**In scope of One-In, One-Out?**	**Measure qualifies as**
£32.3m	£33.2m	-£3.6m	Yes	OUT

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

Competent person schemes (CPS) are a deregulatory measure under which installers can be registered as competent to self-certify that their building work complies with the building regulations. Self-certification, through competent person schemes, is an appropriate response to market failure in a situation where information is costly and difficult to obtain. This removes the burden for installers and consumers of having to notify the work to a building control body in advance and having it checked by them when completed. Where a CPS installer is used, the business benefits from lower prices as building control charges (typically £60 - £180) are not payable. This saving could be passed on to the consumer in lower prices, although this is not accounted for in this IA.

What are the policy objectives and the intended effects?

The policy change seeks to extend the use of self-certification of notifiable building work through authorising new schemes and extending the scope of existing schemes, especially those associated with the Green Deal. The objective is to make work under the Green Deal as inexpensive and efficient as possible whilst ensuring that it fully complies with the relevant requirements in the Building Regulations. Authorising new and extended CPS schemes will allow us to achieve this objective.

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

The two options considered have been:

(1) to do nothing or
(2) to authorise new/extended competent person schemes to self-certify a wider range of types of work than now.

Option 1 would continue to require third party checking by Building Control Bodies (BCB), so would not achieve our deregulatory aims, hence option 2 is the preferred option. Whilst competent person schemes are in themselves deregulatory they can only be authorised through amendments to the Building Regulations.

Will the policy be reviewed? Yes **If applicable, set review date:** Dependent on the outcome of annual inspections of scheme operators by the UK Accreditation Service.

Does implementation go beyond minimum EU requirements?			N/A		
Are any of these organisations in scope? If Micros not exempted set out reason in Evidence Base.	**Micro**	**< 20** Yes	**Small** Yes	**Medium** Yes	**Large** Yes
What is the CO_2 equivalent change in greenhouse gas emissions? (Million tonnes CO_2 equivalent)			**Traded:** N/A	**Non-traded:** **N/A**	

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 the responsible : Date: 17 Dec.12

Summary: Analysis & Evidence

Policy Option 2

Description: To authorise one new Competent Person Scheme operator for an existing type of work and the extension of scope for seven existing Competent Person Scheme operators to cover both existing types of work and three new types of work to meet the policy objectives as set out above.

FULL ECONOMIC ASSESSMENT

Price Base Year 2012	PV Base Year 2012	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: 12.6	**High: 52.1**	**Best Estimate:** 32.3

COSTS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low			0.93	**7.3**
High			0.88	**7.7**
Best Estimate	N/A		0.91	**7.5**

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

New members will incur annual and ongoing registration fees (ranging from £185 - £500 a year) depending on the scheme. Each year we estimate an average of 1,893 members will incur annual registration fees resulting in average annual costs to business of £0.7m, and a total PV cost of £5.7m. Members will need to undertake refresher training every 6 years at a direct cost of ranging from £187.50 - £312.50 per member. We estimate, on average, 396 members requiring training per year resulting in an average annual cost to business ranging from £0.07m to £0.12m, and a total PV cost ranging from £0.62m to £1.03m. We estimate half of those training each year (198 of the 396 members) to lose one days earnings (£118) for attending training at an average annual cost to business of £0.02m, and a total PV cost of £0.2m. There will be a £2.50 direct cost of customers of builders notifying scheme operators of work carried out at an estimated annual cost of £0.1m, with a PV total cost £0.83m.

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

There is a minimal cost to Competent Person Scheme members in time and money to notify a job to a building control body and provide a certificate of compliance to the customer (via the scheme operator), offset by the time and cost that would otherwise have been incurred submitting a building notice.

BENEFITS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low			2.4	**19.9**
High			7.2	**59.8**
Best Estimate	N/A		4.8	**39.8**

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

Savings arise because Competent Person Scheme members do not pay an average £120 charge per job to have their work checked by a Building Control Body. Each year we estimate, on average, of 39,750 jobs a year no longer paying a building control charge, resulting in an average annual benefit of £4.8m, and a PV total benefit of £39.8m. Applying a range to the saving per job (£60 - £180) results in the average annual benefit ranging from £2.4m to £7.2m, and a total PV benefit ranging from £19.9m to £59.8m. All these benefits fall on business. These savings may be passed on to households in lower fees although this is not quantified in this IA.

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

Freeing up of Building Control Bodies' resources to concentrate on other areas of work where self-certification is not appropriate. Improving the level of compliance, as Competent Person Scheme members are likely to be more competent than non-members. Saving of time for Competent Person Scheme members through removal of the need to give local authorities two days notice before building work commences on site. Potentially lower costs for customers as a result of increased competition.

Key assumptions/sensitivities/risks **Discount rate (%)** 3.5

There is an element of uncertainty about estimates which has been reflected through ranges. For instance the average annual cost of Competent Person Scheme membership is in a range of £185-£500 based on information provided by the Competent Person Schemes on their registration fees. Savings per job are estimated in ranges based on an average hourly rate for BCBs of £60 per hour and an estimate of time taken, together with assumptions for the average number of Competent Person Scheme members carrying out a number of jobs each year, based on historical data, advice from local authorities and the Competent Person Schemes. There are some risks of non-compliance with building regulations associated with self-certification but these are considered to be low risk. For more detail see evidence base.

BUSINESS ASSESSMENT (Option 2)

Direct impact on business (Equivalent Annual) £m:			In scope of OIOO?	Measure qualifies as
Costs: 0.8	**Benefits:** 4.6	**Net:** 3.9	Yes	OUT

Evidence Base (for summary sheets)

Introduction and Background

The Building Regulations and development of Competent Person Schemes

The Building Regulations are designed to ensure the health, safety, welfare and convenience of people in and around buildings and provide for furthering energy conservation. Prior to the introduction of competent person schemes (CPS), anyone carrying out building work was required to pay a charge and use a building control service provided by a building control body (BCB), i.e. local authorities (LAs) or private sector approved inspectors, to check plans and/or inspect work to ensure compliance with the relevant requirements of the Building Regulations.

By the late1990s the significant increase in the amount and types of building work subject to the Building Regulations that had to be notified to a BCB before commencement of work could no longer be practicably accommodated within the traditional building control framework. The Government therefore consulted on the principles of allowing competent installers (i.e. businesses - mostly sole traders or small firms) to self-certify their own work to demonstrate compliance with the relevant requirements of the Building Regulations. There was no support for self-certification for whole buildings but much support for specific types of work, provided that the type of work was relatively low incidence of risk and of such a volume that made building control involvement difficult and diverted resources from areas of higher risk. Although there were expressions of interest in participating in such self-certification schemes, progress in taking the proposal forward was initially slow.

In 2002 the revision to Part L (Conservation of fuel and power) extended building regulations requirements to areas not previously covered, notably the energy efficiency of replacement windows and combustion appliances. It was anticipated that there would be over one million notifiable jobs per year for each type of installation (compared to only around half a million other notifiable jobs in total), which would considerably stretch building control resources. It was also considered that the incidence of risk associated with non-compliance was low. It was therefore decided that self-certification would be appropriate in these areas and a number of schemes (known as CPS) were introduced to cover window and boiler installation.

CPS allow registered installers (i.e. members of the schemes) who have been assessed as competent to self-certify that their work complies with the Building Regulations, i.e. they are not required to seek and pay for building control approval from a BCB. They charge consumers for their work but this does not include the cost of a BCB charge.

The Building Regulations were extended to cover electrical installation work in dwellings through Part P (Electrical safety) in 2005. Again, given the scale of the potential number of notifications it was felt this could only be practicably and cost-effectively implemented if there were CPS to remove the costs and burden of notification to BCBs and the risk was considered to justify this approach. Since then the range of types of work and the number of authorised schemes has continued to increase to cover areas such as plumbing, air-conditioning systems, roof replacements and cavity wall insulation (an up to date list can be found in Schedule 3 of the Building Regulations 2010, as amended and on the DCLG website[1]).

[1] http://www.communities.gov.uk/planningandbuilding/buildingregulations/competentpersonsschemes/

Authorisation and monitoring of CPS

Applicants to become a CPS operator are vetted by DCLG against published conditions of authorisation in consultation with other relevant government departments, building control representatives bodies and the Building Regulations Advisory Committee (BRAC). The operators must satisfactorily demonstrate that they have the managerial, financial and technical ability to operate a scheme before they are authorised to self-certify a type or types of work in the Building Regulations.

Installers wishing to become a member of a CPS must pay a membership fee and demonstrate to the scheme operator that they have the necessary technical competence to carry out a type of work to building regulations standards. Competence is generally assessed against National Occupational Standards at NVQ level 3 or other equivalent standards under a Minimum Technical Competence procedure, with continuing random monitoring of members' work to make sure it meets those standards.

When a job is completed an installer must notify the relevant LA , via their CPS operator, of the work carried out and certification of building regulations compliance is provided to the consumer (i.e. customer). It should be noted that membership of a CPS is voluntary – if an installer chooses not to join a CPS they still have the option of having their work supervised by a BCB.

About 2.5 - 3.0 million jobs are currently self-certified under CPS each year. As stated in Annex 1, we have carried out periodic monitoring of the performance of existing CPS and copies of previous reports can be found on the DCLG website[2]. These have shown that schemes have generally achieved a high level of compliance with the health, safety and energy efficiency requirements of the Building Regulations and have proved to be a success. The number of complaints from customers is a miniscule fraction of the jobs carried out under CPS (0.1% at most) and many of these are not about failure to meet building regulations standards. Evidence has therefore demonstrated that there are low risks attached to self-certification in the areas of work authorised to date.

DCLG has recently implemented an enhanced set of criteria for conditions of authorisation and monitoring of CPS designed to improve robustness, consistency and quality assurance and ensure a level playing field between the schemes. This included a condition that from June 2012 all CPS achieve accreditation to British Standard EN 45011 by the United Kingdom Accreditation Service (UKAS), with a two year transitional period. UKAS will then monitor the schemes regularly to ensure that they continue to meet their conditions of authorisation.

Other Government schemes

DCLG works with the Department of Energy and Climate Change to align the CPS system with its related schemes as appropriate, i.e. the Microgeneration Certification Scheme (a quality assurance scheme relating to renewable microgeneration technologies) and the Green Deal (a scheme offering consumers energy efficiency improvements with no up front costs). This allows installers to derive the benefits of mutual membership.

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[2] http://www.communities.gov.uk/planningandbuilding/buildingregulations/competentpersonsschemes/

Rationale for Intervention / Policy Objectives

Allowing competent installers who are members of CPS to self-certify their work means that they do not need to notify in advance and pay a BCB to check the work, thus removing a burden on installers and consumers, and also BCBs as it frees up their resources to concentrate on other areas of building work where the risk is higher and self-certification is not considered appropriate. The fact that installers need to demonstrate their competence and be subject to ongoing monitoring also means that the installations should achieve a higher level of compliance with the relevant requirements of the Building Regulations than other work. Competition amongst CPS also helps to ensure they keep membership fees low. CPS therefore provide an alternative, cost effective and deregulatory means of ensuring compliance with the Building Regulations and helps to reduce the level of unauthorised work carried out. The CPS framework is also consistent with the Government's localism agenda.

Self-certification, through competent person schemes, is an appropriate response to market failure where information is costly and difficult to obtain. It provides an alternative, cost effective and deregulatory means of delivering compliance with the Building Regulations.

DCLG proposes to authorise one new and extend the scope of seven existing CPS in the Building Regulations to cover further types of work, mainly in alignment with the Green Deal, where the risk is considered to be justified and applications were invited accordingly. Following careful consideration and analysis of the applications received, the further types of work we propose to authorise are areas where it is considered that there is a low risk in authorising further schemes to self-certify. A table listing the new and extended CPS and further types of work we propose to authorise is included in 'Option 2' below.

The new types of work that we propose to authorise in support of the Green Deal are solid wall insulation, both internal, external and 'hybrid' insulation which is a combination of the two. We have concluded that this type of work is relatively low risk and that there is likely to be sufficient volume of work due to the Green Deal for it to be appropriate for CPS.

The other types of work for which we propose to authorise new and extended schemes are types of work that are already authorised. In line with European competition law, we invite applications periodically in order to allow a free market for any body to run these schemes, provided that they have the technical competence and meet all our other conditions. Competition provides the necessary disciplines in terms of keeping costs for installers under control and our conditions provide a control on quality.

Description of policy options considered

Option 1: To do nothing and authorise no extensions to the scope of existing CPS.

Option 2: To authorise one new CPS operator (ATTMA) and the extension of the scope of seven existing CPS to cover the types of work indicated in the table below to meet the above policy objectives:

Type of work	CPS operator
Pressure testing for the air tightness of buildings	ATTMA (new operator)

Installation of- (a) an oil-fired combustion appliance; or (b)oil storage tanks and the pipes connecting them to combustion appliances.	Benchmark STROMA
Installation of a heating or hot water system connected to an oil-fired combustion appliance or its associated controls.	Benchmark
Installation of a mechanical ventilation or air conditioning system or associated controls, which does not involve work on a system shared with parts of the building occupied separately, in a building other than a dwelling.	ECA NAPIT STROMA
Installation of an air conditioning or ventilation system in a dwelling, which does not involve work on systems shared with other dwellings.	ECA STROMA
Installation of a lighting system or electric heating system, or associated electrical controls.	Benchmark
Installation, as a replacement, of a window, rooflight, roof window or a door in an existing dwelling.	Benchmark NAPIT STROMA
Installation of a sanitary convenience, sink, washbasin, bidet, fixed bath, shower or bathroom in a dwelling, which does not involve work on shared or underground drainage.	ECA HETAS STROMA
Installation of a wholesome cold water supply or a softened wholesome cold water supply.	ECA HETAS
Installation of a supply of non-wholesome water to a sanitary convenience fitted with a flushing device which does not involve work on shared or underground drainage.	ECA HETAS STROMA
Insertion of insulating material into the cavity walls of an existing building.	Ascertiva Benchmark NAPIT STROMA
Installation, as a replacement, of the covering of a pitched or flat roof and work carried out by the registered person as a necessary adjunct to that installation.	NAPIT
Installation, as a replacement, of a window, rooflight, roof window or door in an existing building other than a dwelling (excluding glass which is load bearing or structural or which forms part of glazed curtain walling or a revolving door).	Certass STROMA
Installation of insulating material to the	Ascertiva

internal walls of a building (new type of work)	Benchmark Certass NAPIT STROMA
Installation of insulating material to the external walls of a building, not including insulation of demountable-clad buildings (new type of work)	Ascertiva Benchmark Certass NAPIT STROMA
Installation of insulating material to both the external and internal walls of a building ("hybrid insulation"), not including demountable clad buildings (new type of work)	Ascertiva Benchmark NAPIT

Costs and benefits of each option (including risks and general assumptions)

OPTION 1:
If we do nothing and authorise no new or extended Competent Person Schemes, no new costs or benefits will arise.

OPTION 2:
It is estimated that the following costs and benefits will arise if we authorise the proposed new and extended Competent Person Schemes:

Costs

Option 1

There are no costs associated with option 1 as it is the baseline which option 2 is compared against.

Option 2

(a) Registration fees

All competent person scheme operators require annual registration fees paid from businesses registered with them. These fees form the costs of operating the scheme with an allowance for a small surplus which may only be used for the development of the scheme. Under the conditions of authorisation any funds which the members of a scheme have paid for may only be used for the benefit of the members of the scheme.

Existing members' registration costs

In the proposed authorisation of new types of work (or the proposed extension of schemes to existing types of work for which they were not previously authorised) some of the existing members of the schemes will extend their ability to self-certify the work they do to new types of work or extensions. As these members are already paying a registration fee to belong to a scheme there will be no additional registration fee for them to pay.

New members' registration costs

However, all the schemes will attract new members not currently belonging to any competent person scheme and in respect of these the registration fee is a cost to the members.

In their application forms for extensions to their schemes scheme operators provided the cost of the annual registration fee. They also provided estimates of the number of new members who would join the scheme in each of the following ten years to carry out and self-certify the types of work for which the schemes are being authorised. The number of new members we estimate will join each scheme in each year is presented in table A.1 in Annex A. We have used the cumulative number of members (excluding current members) in each scheme (found in table A.3 in the Annex) and multiplied it by the registration fee each scheme operator will charge their members. Table 1 displays the annual fees each scheme will charge each member along with the average number of members per year over the 10 years of this policy.

Table 1 – Annual registration costs to new scheme members

Scheme Operator	Annual fees	Average annual number of members incurring fees	Average annual cost	Total Present Value Costs (Millions)
ATTMA	£500	28	£13,750	£0.1
Ascertiva	£379	460	£174,340	£1.4
Benchmark	£250	275	£68,750	£0.6
Certass	£200	55	£11,000	£0.1
ECA	£450	275	£123,750	£1.0
HETAS	£185	55	£10,175	£0.1
NAPIT	£340	470	£159,800	£1.4
STROMA	£445	275	£122,375	£1.0
Total	**N/A**	**1,893**	**£683,940**	**£5.7**

The average annual cost to scheme members will be £683,940, based on an average of 1,893 members paying a fee in each of the 10 years of the policy. This yields in a total present value cost of annual registration fees over 10 years of £5.7m.

Pre registration training

Before being accepted for registration, new members must demonstrate that they have the technical competences needed to carry out work to the standards required under the Building Regulations. For some new members this may mean that they need to undertake some pre-registration training to bring their competences up to the standards needed for registration.

This Impact Assessment treats this as a non monetised cost. This is because membership of a competent person scheme is voluntary and therefore any cost of pre-registration training is borne voluntarily. We also feel that the costs are outweighed by the in kind benefits (reputation gain) the firms achieve by enrolling on competent persons schemes, which we also non monetised. Any businesses that do not wish voluntarily to undertake this type of training have the ability use a building control body to assess the compliance of their work.

(b) Ongoing training costs

Under the conditions of authorisation members of schemes must maintain their technical competence levels and where there is a change to standards in the Building Regulations or to British or European technical standards upgrade their competences accordingly.

The Department has now instituted a periodic review timetable for the different Parts of the Building Regulations which in general means that each part is likely to be reviewed and amended as appropriate periodically; for the purpose of this analysis we have assumed that this would occur once every six years. This means that members of schemes would normally need to undergo mandatory upgrade at least once every six years.

Scheme operators generally organise this upgrade training but scheme members must pay for it separately from the registration fees. There are a number of ways that this training can be delivered: e.g. formal courses at technical colleges, workshops at a scheme operator's premises, distance learning packages.

The Department has estimated, based on typical fees at training colleges for a one or part day course, the average cost of such training would be £250 for each member once every six years. This cost would apply to all existing members choosing to do a new type of work, and to new members joining schemes. We do not know the behaviour of when scheme members will undertake training so we have assumed one sixth (1/6) of the cumulative number of members will undertake training each year and incur the direct training cost of £250. Table 2 displays the average number of members we expect to undertake training per year along with the average cost.

Table 2 – Ongoing training costs to members

Scheme Operator	Training cost per member	Average number of members trained per year	Average annual cost	Total Present Value Costs (Millions)
ATTMA	£250	7	£1,813	£0.0
Ascertiva	£250	88	£22,083	£0.2
Benchmark	£250	46	£11,458	£0.1
Certass	£250	26	£6,458	£0.1
ECA	£250	71	£17,708	£0.1
HETAS	£250	13	£3,333	£0.0
NAPIT	£250	90	£22,500	£0.2
STROMA	£250	54	£13,542	£0.1
Total		**396**	**£98,896**	**£0.83**

We therefore anticipate an average annual cost of training to members is £98,896, with a total present value cost over 10 years of £0.8m.

Sensitivity Analysis

To account for the uncertainty in the direct cost of the training we have applied a 25% sensitivity to the £250 cost of training. This results in a low estimate cost of training of £187.50 per member, and a high estimate of £312.50. Applying these ranges to the estimated number of jobs we estimate to be carried out results in an average annual cost of training ranging from £74,172 to £123,620, with a midpoint of £98.896. This results in a total present value total cost ranging from £619,517 to £1,032,529, with a midpoint of £826,023.

(c) Loss of earnings from training

In some cases scheme members may be able to arrange their training at times when they would not be working but It is also likely that some scheme members will need to undertake their training during working time and would therefore suffer a loss of earnings. It is not possible to give an evidence-based estimate of the numbers who might suffer a loss of earnings because they were unable to work round the times they would need to undergo continued training as this will depend on the future choices of the method of continued training adopted by scheme operators. For the purposes of this Impact Assessment we have assumed that half the members undertaking training would suffer a loss of earnings[3]. Given average earnings for the types of people that would need this type of training (plumbers, electricians, builders, heating engineers) we estimate that the average loss of earnings for affected members of schemes would be £118.33[4][5] based on a builder losing 8 hours of work. We think this is a conservative estimate of the loss of earnings to builders, because the building industry uses a database, which is used when estimating wage costs of builders, places a higher hourly wage rate to builders than the Office of National Statistics ASHE figures. We have assumed that half of those attending training (as in table 2) will have to attend training during work hours and will lose earning. Table 3 displays the average annual number of members losing earnings per scheme along with the total cost.

Table 3 – Loss of earnings for members

Scheme Operator	Lost earnings per member	Average number of members losing earnings per year	Average annual cost	Total Present Value Costs (Millions)
ATTMA	£118.33	4	£429	£0.0
Ascertiva	£118.33	44	£5,226	£0.0
Benchmark	£118.33	23	£2,712	£0.0
Certass	£118.33	13	£1,528	£0.0
ECA	£118.33	35	£4,191	£0.0
HETAS	£118.33	7	£789	£0.0
NAPIT	£118.33	45	£5,325	£0.0
STROMA	£118.33	27	£3,205	£0.0
Total		**198**	**£23,404**	**£0.20**

Table 3 recognises that, on average, 198 members losing a days earnings per year at an average annual cost of £23,404. This results in a total present value cost to members of lost earnings of £0.2m over 10 years.

(d) Cost of notification or work

[3] This assumption has been made in previous Impact Assessments

[4] Hourly wage rate of £11.10 obtained from ONS ASHE 2011, for a 'Skilled construction and building trades' worker. This has been uprated by 30% to account for overheads as per standard cost model methodology to take the hourly wage rate to £14.43.

[5] The wage rate has been uprated to 2012 prices using the Treasury's GDP deflator. This increased the figure by 2.5% to an hourly wage rate of £14.79

For each job that a scheme member carries out, regulation 20 of the Building Regulations 2010 requires that a compliance certificate be given to the customer and a notice of the completed work to the local authority. This is normally carried out by notifying the scheme operator of the work and the scheme operator then sends a certificate to the customer and the notice to the local authority. This typically costs £2.50 per job. However, this cost is a direct cost to the customer as part of the bill for the work carried out and thus is not a cost on the scheme member.

Applying the £2.50 cost to each customer for every job carried out results in an average annual cost to customers of £99,375 per year, based on an estimated 39,750 jobs, on average, being carried out per year. The total present value cost to consumer's totals £830,187 over 10 years.

(e) Scheme operator costs

As mentioned above, the registration fees from members are used by the scheme operator for what is required of it by the conditions of authorisation in respect of the extension to types of work. This would include:

- UKAS accreditation to BS EN 45011in respect of the extension to the types of work for which the scheme operator is to be authorised
- The cost of periodic surveillance of a random sample of member's work to make sure it complies with the Building Regulations.
- Promotional activity relating to the new types of work for which scheme operators are to be authorised
- Maintaining additional membership lists and putting them on the scheme's website
- Making the arrangements for the provision of financial protection for the customer such as guarantees, warranties (the cost of the guarantees and warranties is borne directly by the customer)
- General administrative costs (rent of premises, telephone and IT, salaries of staff)

We have not monetised these as their cost is within the costs of the registration fees payable and to do so would thus be double counting.

(f) Costs to Building Control Bodies

The new and extended Competent Person Schemes do not represent a loss of income to building control bodies (local authorities and private sector approved inspectors) when set against their costs. The building control service is a user paid for service and local authorities are required to set their charges under *The Building (Local Authority Charges) Regulations 2010* based on the recovery of their costs of carrying out their building control functions. If no service is provided there are no costs to the local authority and is therefore cost neutral. This similarly applies to Approved Inspectors.

Total Costs

Total average annual costs range from £880,891 to £930,339 with a midpoint of £905,615. The total present value cost ranges from £7.3m to £7.7m, with a midpoint of £7.5m.

The total average annual costs just to business ranges from £781,516 to £830,964, with a midpoint of £806,240. The total present value cost to business ranges from

£6.5m to £6.9m, with a midpoint of 6.7m. This results in an equivalent annual cost to business of £0.8m in current prices.

Benefits

Option 1

There are no benefits associated with option 1 as it is the baseline which option 2 is compared against.

Option 2

Where an installer is not a member of a competent person scheme it is necessary for the work done to be notified in advance to a building control body (local authority or private sector approved inspector). The notification triggers a building control charge to pay for the carrying out of statutory building control functions by the building control body. The basis for local authority charges is set out in the Building (Local Authority Charges) Regulations 2010 and, briefly, means that local authorities can charge only for the number of hours of work they take for each notified job. Approved inspector charges are set by negotiation between the approved inspectors and their clients. They are very similar to local authority charges for competitive reasons.

In this Impact Assessment we have used a local authority cost of £60 per hour which is based on an average of local, authority hourly rates provided by LABC and the Building Control Alliance[6], which differ from local authority to local authority.

Each job notified to a local authority will need to be processed administratively at each stage of the building control function and for the types of work covered by the extended competent person schemes we estimate that this would be one hour. Building control bodies almost always carry out one or more inspections on site of the work being undertaken. For the types of work in the extended competent person schemes we estimate that this would be on average a further hour of building control time. We have thus based the cost of building control time at two hours or £120.

Installers registered with competent person schemes do not have to notify building control bodies in advance or pay a building control charge. This gives a benefit of saving building control costs to those joining competent person schemes. This policy is extending the scope of competent persons schemes, meaning new types of work are being bought in and will thus benefit from no longer having to pay a building control charge.

We have estimated the number of jobs that each competent person scheme member would likely undertake each year. These figures are derived from estimates given in the application forms by the applicant scheme operators and from DCLG statistics on the number of jobs carried out for comparable work by existing schemes[7].

There are, however, no building control savings in respect of the proposed ATTMA scheme. The scheme, which covers air-tightness testing of new buildings, has as its outcome a record of test results which are given to the building control body. There is nothing to inspect on site. All new buildings are subject to notification to a building

[6] Sourced from CIPFA. Document is titled: Local Authority building control accounting, guidance for England and Wales. 2nd edition 2010.

[7] http://www.communities.gov.uk/planningandbuilding/buildingregulations/competentpersonsschemes/cpsstatsinfo

control body and a building control charge is payable. The fact that a competent person scheme member gives test results that a building control body can accept as evidence would not result in no or a lower building control charge. ATTMA has therefore been excluded from this analysis of savings from not having to pay building control charges.

The benefits are quantified by multiplying the number of jobs a building control officer no longer needs to inspect by the saving per job as a result of building control no longer having to inspect the work. Firstly we need to estimate the number of jobs we anticipate to be undertaken each year. We have profiled the cumulative number of members in each scheme, in each year, in table A.4 in Annex A. This shows a total of 23,735 members belonging to a scheme over 10 years, meaning 2,374 members belonging to a scheme, on average, per year. We have then assumed that each member, in each scheme, will carry out a certain number of jobs per year, ranging from 10-20 depending on the scheme. Table 4 presents the average number of members belonging to schemes per year, multiplied by the estimated number of jobs we expect each member to carry out per year. This results in an average of 39,750 jobs being carried out per year. Table A.5 in the annex presents an annual profile of the number of jobs carried out in each year of the policy.

Table 4 – total number of jobs to be carried out per year

Scheme Operator	Average number of members per year[1]	Anticipated number of jobs to be completed per year per member	Total number of jobs carried out per year
Ascertiva	530	10	5,300
Benchmark	275	20	5,500
Certass	155	10	1,550
ECA	425	20	8,500
HETAS	80	20	1,600
NAPIT	540	20	10,800
STROMA	325	20	6,500
Total	**2,374**	**N/A**	**39,750**

1. Based on the number of current members, plus the new members we anticipate joining in each of the 10 years of the policy. The cumulative number of members belonging to schemes, per year, is presented in table A.4 in Annex A.

We expect, on average, 39,750 jobs per year to no longer incur a building control charge. With an average building control charge of £120 per job we anticipate average annual savings of £4.8m and a present value total benefit of £39.8m. Table 5 displays the average annual savings along with the total present value savings/benefits.

Table 5 – savings of extending the CPS

Scheme Operator	Saving per job	Average number of jobs per year (table X)	Average annual benefit	Total Present Value Benefit (Millions)
Ascertiva	£120	5,300	£636,000	£5.3
Benchmark	£120	5,500	£660,000	£5.4
Certass	£120	1,550	£186,000	£1.6
ECA	£120	8,500	£1,020,000	£8.5
HETAS	£120	1,600	£192,000	£1.6

NAPIT	£120	10,800	£1,296,000	£11.1
STROMA	£120	6,500	£780,000	£6.4
Total		**39,750**	**£4,770,000**	**£39.8**

Sensitivity Analysis

To account for the uncertainty surrounding the time saved for each job we have applied a range to the savings per job. For a low estimate we have assumed 1 hour of building control time taken to inspect the members work. We have used a 1 hour because some jobs are can be inspected quickly (such as windows), therefore we have use a saving per job of £60 for the low estimate. Using the low estimate results in average annual savings of £2.3m. The total present value benefit over 10 years totals £19.9m.

For a high estimate we have assumed three hours of building control time to inspect jobs and carry out their administrative tasks. We have used 3 hours because for some jobs, such as solid wall insulation, building control officers may need to visit premises at least twice to inspect work. This results in an three hours of saved building control time per job (at £60 per hour). Using the high estimate saving results in average annual savings of £7.2m. The total present value benefit over 10 years totals £59.8m.

Non-monetised benefits

The 'Rationale for Intervention' above refers to other benefits provided by the proposed extended Competent Person Schemes, in particular removing the burden on installers and consumers of requiring notification of work in advance and freeing up building control bodies' resources, and improving the level of compliance with the Building Regulations.

In addition, a further benefit may arise because a notice to commence must be made to the local authority at least two days before building work commences on site, whereas competent person scheme registration does not require such a notice. This could therefore provide a potential benefit of a saving of two days delay to work commencing on site. However, most installers will take account of this small delay when planning their work and as there is no evidence as to whether the delay causes any real difficulties, the potential savings have not been monetised.

A further benefit is that there will be more competition between the various schemes for the types of work likely meaning lower costs to the customers.

Any loss of work for building control bodies frees up their scarce resources to concentrate on areas of higher risk.

One In One Out

The equivalent average annual benefit best estimate is £4.6m (high: £6.9, low: £2.3m) and the equivalent average annual cost best estimate is £0.8m, giving an annual net benefit to business best estimate of £3.9m (high: £6.2m, low: £1.5m). This policy provides an annual net 'out' of £3.9m under one in one out and in current prices.

Specific Impacts Tests

Statutory equality duties

We have considered the whether the statutorily protected groups would be impacted through the completion of our equality statement for changes to the Building Regulations. We concluded that for CPS there would be no impact.

Economic impacts

The main specific group affected by the proposed extended Competent Person Schemes are micro-and small businesses as membership of CPS is mainly from businesses of this size. As registration with a competent person scheme is voluntary only businesses which think it will be beneficial to their business will wish to register.

Members of the extended Competent Person Schemes will be able to quote a price for the work which is likely to be lower than those installers who are not in schemes, as the price would not include the amount of the building control charge and thus give a competitive advantage.

In addition, more competition between Competent Person Schemes to carry out the further types of work will also keep their fees at a competitive level and benefit consumers.

Environmental impacts

As stated under 'Rationale for Intervention' above, competent Person Scheme installers have to demonstrate their competence and are subject to ongoing performance monitoring. This means that the installations should achieve a higher level of compliance with the relevant requirements of the Building Regulations including the energy and water efficiency requirements. This should result in a small improvement to environmental standards and goals.

Social impacts and sustainable development

No impact.

Summary (including preferred option and implementation plan)

DCLG therefore proposes to proceed with Option 2, to authorise the extension of some existing Competent Person Schemes to self-certify the types of work indicated, so as to further reduce the costs and burdens of complying with the Building Regulations at an average net saving/benefit of around £3.9m per annum, and help improve compliance.

The extended Competent Person Schemes will be authorised as part of amendments to the *Building Regulations 2010* The amendment regulations will come into force on 1 January 2013 and will be for the authorised schemes to operate their extensions as soon as possible from that date.

Annex A

Table A.1 - Number of new members joining, each scheme, per year

Scheme	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Total new members	Average annual number of new members
ATTMA	5	5	5	5	5	5	5	5	5	5	50	5
Ascertiva	70	120	120	120	120	20	20	20	20	20	650	65
Benchmark	50	50	50	50	50	50	50	50	50	50	500	50
Certass	10	10	10	10	10	10	10	10	10	10	100	10
ECA	50	50	50	50	50	50	50	50	50	50	500	50
HETAS	10	10	10	10	10	10	10	10	10	10	100	10
NAPIT	425	10	10	10	10	10	10	10	10	10	515	51.5
STROMA	50	50	50	50	50	50	50	50	50	50	500	50
Total	**670**	**305**	**305**	**305**	**305**	**205**	**205**	**205**	**205**	**205**	**2915**	**291.5**

Table A.2 – Number of current members

Scheme	Current members
ATTMA	16
Ascertiva	70
Benchmark	0
Certass	100
ECA	150
HETAS	25
NAPIT	70
STROMA	50

Total	**481**

Table A.3 – Cumulative number of members (excluding current members for registration costs)

Scheme	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Total members	Average annual number of members
ATTMA	5	10	15	20	25	30	35	40	45	50	275	28
Ascertiva	70	190	310	430	550	570	590	610	630	650	4,600	460
Benchmark	50	100	150	200	250	300	350	400	450	500	2,750	275
Certass	10	20	30	40	50	60	70	80	90	100	550	55
ECA	50	100	150	200	250	300	350	400	450	500	2,750	275
HETAS	10	20	30	40	50	60	70	80	90	100	550	55
NAPIT	425	435	445	455	465	475	485	495	505	515	4,700	470
STROMA	50	100	150	200	250	300	350	400	450	500	2,750	275
Total	**670**	**975**	**1,280**	**1,585**	**1,890**	**2,095**	**2,300**	**2,505**	**2,710**	**2,915**	**18,925**	**1,893**

Table A.4 – Cumulative number of members (including current members)

Scheme	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Total members	Average annual number of members
ATTMA	21	26	31	36	41	46	51	56	61	66	435	44
Ascertiva	140	260	380	500	620	640	660	680	700	720	5,300	530
Benchmark	50	100	150	200	250	300	350	400	450	500	2,750	275
Certass	110	120	130	140	150	160	170	180	190	200	1,550	155
ECA	200	250	300	350	400	450	500	550	600	650	4,250	425
HETAS	35	45	55	65	75	85	95	105	115	125	800	80
NAPIT	495	505	515	525	535	545	555	565	575	585	5,400	540

STROMA	100	150	200	250	300	350	400	450	500	550	3,250	325
Total	**1,151**	**1,456**	**1,761**	**2,066**	**2,371**	**2,576**	**2,781**	**2,986**	**3,191**	**3,396**	**23,735**	**2,374**

Table A.5 – Number of jobs carried out per year

Scheme	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Total jobs	Average annual number of jobs carried out per year
Ascertiva	1,400	2,600	3,800	5,000	6,200	6,400	6,600	6,800	7,000	7,200	53,000	5,300
Benchmark	1,000	2,000	3,000	4,000	5,000	6,000	7,000	8,000	9,000	10,000	55,000	5,500
Certass	1,100	1,200	1,300	1,400	1,500	1,600	1,700	1,800	1,900	2,000	15,500	1,550
ECA	4,000	5,000	6,000	7,000	8,000	9,000	10,000	11,000	12,000	13,000	85,000	8,500
HETAS	700	900	1,100	1,300	1,500	1,700	1,900	2,100	2,300	2,500	16,000	1,600
NAPIT	9,900	10,100	10,300	10,500	10,700	10,900	11,100	11,300	11,500	11,700	108,000	10,800
STROMA	2,000	3,000	4,000	5,000	6,000	7,000	8,000	9,000	10,000	11,000	65,000	6,500
Total	**20,100**	**24,800**	**29,500**	**34,200**	**38,900**	**42,600**	**46,300**	**50,000**	**53,700**	**57,400**	**397,500**	**39,750**

Title: Simplifying the provisions of Part B2 of the Building Regulations **IA No:** DCLG 0083 **Lead department or agency:** Department of Communities and Local Government **Other departments or agencies:**	**Impact Assessment (IA)** **Date:** 17/12/2012 **Stage:** Final **Source of intervention:** Domestic **Type of measure:** Secondary legislation **Contact for enquiries:** Brian Martin

Summary: Intervention and Options

RPC Opinion: Validated by RPC

Cost of Preferred (or more likely) Option				
Total Net Present Value	**Business Net Present Value**	**Net cost to business per year** (EANCB on 2009 prices)	**In scope of One-In, One-Out?**	**Measure qualifies as**
£399m	£452m	-£24.4m	Yes	OUT

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

Requirement B2 of the Building Regulations restricts the spread of flame and heat release rate of the materials used in lining any partition, wall, ceiling or other internal structure. The guidance in Approved Document B sets reasonable standards but as a result of changes in technology this guidance may be imposing additional cost beyond that necessary to achieve appropriate levels of fire safety. Wall coverings products currently available on the UK market and certified according to British Standards will soon have to bear a European Standard marking, but will not achieve European Class B standard as currently required. Allowing European Class C in specific circumstances will deliver adequate safety levels at lower cost.

What are the policy objectives and the intended effects?

The policy objective is to reduce the cost of delivering appropriate standards of fire safety in buildings. The amendments to Approved Document B will allow greater use of acrylic materials to be used in lighting installations; evidence suggests that appropriate safety standards will be maintained and a significant cost saving to industry will result. Allowing European Class C products for wall coverings in specific circumstances is intended to deliver equivalent fire safety standards to those in place currently and to avoid unintended consequences of cost increases for the industry.

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

Option 0 - 'Do Nothing'

A do nothing option would continue to see unnecessary cost incurred in new lighting installations and would have unintended consequences for wall coverings manufacturers

Option 1 – Make amendments to requirement B2

The preferred policy option is to make amendments to Requirement B2 and this is considered in this impact assessment against a counterfactual 'Do Nothing' option. The proposed amendments were widely supported by respondents to the consultation.

Will the policy be reviewed? It will be reviewed. **If applicable, set review date:** 11/2016

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	**Medium** Yes/No	**Large** Yes/No
What is the CO_2 equivalent change in greenhouse gas emissions? (Million tonnes CO_2 equivalent)			**Traded:** **0.**6 $MtCO_2$	**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 the responsible SELECT SIGNATORY:

Date: 17 Dec. 12

Summary: Analysis & Evidence

Policy Option 1

Description: Simplify the Guidance Supporting Requirement B2

FULL ECONOMIC ASSESSMENT

Price Base Year 2012	PV Base Year 2013	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: 167.4	**High: 661.9**	**Best Estimate:** 399.3

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	0.9	Optional	**0.9**
High	6.1	Optional	**6.1**
Best Estimate	2.9	0	**2.9**

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

One off transition costs for 4500 building control officers and 60,000 electrical engineers to familiarise themselves with the new arrangements taking approximately one hour per professional (£4.1m in the central case).

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

None

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	Optional	10.2	**173.5**
High	Optional	38.9	**662.8**
Best Estimate	0	23.6	**402.2**

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

Capital cost savings for lighting installations in new build commercial and education projects (£86m) and refurbishment commercial projects (£153m). Energy savings amounting to £127m and carbon savings amounting to £18m as a result of using fewer light fittings. Benefit to wall covering manufacturers of £19 m from avoiding the increase in production costs that would arise if European standards continued to be referenced when product marking becomes mandatory.

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

None

Key assumptions/sensitivities/risks **Discount rate (%)** 3.5

The proposals are designed to deliver appropriate standards of fire safety as backed by external research. The estimated benefits are particularly sensitive to the cost of individual light fittings (which have been provided by experts and are considered robust) and to future build and refurbishment rates for commercial projects, both of which are uncertain and are explored further in the evidence base.

BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:			In scope of OIOO?	Measure qualifies as
Costs: -0.16	**Benefits: +26.48**	**Net: +26.32**	Yes	OUT

Evidence Base (for summary sheets)

Problem under consideration

Background on the Building Regulations

1. The Building Regulations control certain building work - principally to protect the health, safety and welfare of people in or around buildings. Part B of Schedule 1 of the regulations relates to fire safety aspects of building design and construction and Approved Document B contains statutory guidance that demonstrates how the provisions can be complied with.

2. The regulations themselves are expressed in "functional" terms and do not dictate how the desired level of safety *must* be achieved. However, for the benefit of both industry and building control bodies, advice on how the requirements of the Building Regulations *may* be met are contained in guidance approved by the Secretary of State. This covers some of the more common building situations, but there may well be alternative ways of achieving compliance with the provisions. However, if followed, the guidance may be relied upon in any proceedings as tending to indicate compliance with the Building Regulations.

3. Requirement B2 of the Building Regulations restricts the spread of flame and heat release rate of the materials used in lining any partition, wall, ceiling or other internal structure. The guidance in Approved Document B sets reasonable standards by reference to both the European (EN) and British (BS) test and classification systems. The appropriate classification varies in the guidance depending on the location of the wall lining and either system of classification can be used. These design standards provide a baseline set of technical performance requirements for fire safety, but are not exclusive of other options being used to show compliance.

Thermoplastic Lighting Diffusers

4. The existing guidance in Approved Document B covering the application of requirement B2 to lighting diffusers was developed some time ago. Since then lighting technology has changed considerably and requirements for energy efficiency have become more stringent. Having looked again at this guidance, a solution was proposed at consultation stage which would allow more efficient lighting layouts by relaxing the restrictions on use of acrylic lighting diffusers.

Decorative Wall Coverings

5. The existing guidance in Approved Document B covering the application of requirement B2 to wall linings does not clearly differentiate between decorative wall coverings and wall linings that form part of the construction. As a result there is uncertainty as to how decorative coverings should be addressed. This is particularly pertinent at this time as a mandatory requirement to use the European classification system for fire performance which takes effect in 2013 has the potential to introduce unintended consequences and increased costs for certain types of wall coverings.

Rationale for intervention;

6. Building Regulations apply to "building work" (typically the erection or extension of a building) and seek to ensure buildings meet certain minimum health, safety, welfare and sustainability standards. Part B seeks to ensure that a building is safe in the event of a fire. This addresses an important information failure in that assessing fire safety performance after construction is complex and costly to rectify. By specifying fire safety performance standards at the point of build these costs are minimised. Designers, builders and even owners might take too short term a perspective in respect of fire safety and be too optimistic in assessing risk. There are also agency issues in that they also might not face the full costs of fire damage if the building is occupied by tenants who face the health and safety risk, cost of fire service provision are borne by the public sector or they are able to obtain insurance against such an incident. Minimum fire safety standards are therefore important for a well-functioning market.

7. This deregulatory policy aims to continue to deliver these benefits of Part B of the Building Regulations but to do so without industry incurring unnecessary costs.

8. As the legislative provision is “functional”, statutory guidance contained in the Approved Documents sets some of the ways, for the more common buildings, of ensuring basic minimum health, safety and welfare standards are achieved when constructing buildings. This provides certainty for building control bodies and industry alike as it sets out what is sufficient (whilst providing flexibility to provide alternative building approaches where beneficial). Importantly, it also ensures that a proper cost/benefit assessment and consultation with industry has been undertaken by Government to assess what reasonable minimum standards are appropriate (and avoids the risk of unnecessarily onerous and costly standards being imposed on business).

9. DCLG undertook an exercise in the latter half of 2010 to determine what changes were necessary to the Building Regulations to ensure they remained fit-for-purpose, with a particular emphasis on identifying measures to reduce the cost of regulation to business and any other “must do” regulatory changes.

10. There were 248 responses from our external partners to this exercise. In addition, DCLG drew upon ideas and suggestions submitted to the Cabinet Office’s *Your Freedom* and DCLG’s own website. A summary and analysis of responses and details of the work being considered in advance of the consultation this proposal forms a part of is contained in *Future changes to the Building regulation – next steps*[1]. As set out in this document:

11. “Few responses questioned the principle of regulations setting national standards that ensure buildings are built to baseline standards, although there was some comment that they were on firmest grounds in relation to health and safety (rather than wider sustainability objectives). Many specifically recognised the positive role Building Regulations played and welcomed the fact that there was a nationally applied set of minimum requirements.”

12. There were 54 responses relating to the fire safety provisions in Part B. A significant proportion of these included calls for greater regulation and the wider use of fire suppression systems. However, this exercise did not produce any significant new evidence on the health and safety benefits of greater sprinkler provision that would alter the cost/benefit analysis and the basis of the current approach.

Thermoplastic Lighting Diffusers

13. The Lighting Industry Federation submitted a request seeking clarification of the provisions in Approved Document B that affect the specification of thermoplastic lighting diffusers. Supporting evidence in the form of a research report by BRE global supported the technical case for allowing greater use of acrylic materials, which indicated that a layout allowing acrylic material would deliver fire safety ‘equivalent to or better than’ the current approach[2].

Decorative Wall Coverings

14. In addition to the comments made to the Department in response to specific calls for evidence, we have also identified a need to clarify how the provisions in relation to Requirement B2 relate to decorative wall coverings. As it stands the guidance does not clearly differentiate between decorative wall coverings and wall linings. As a result there is uncertainty as to how decorative wall coverings should be addressed.

15. The guidance in Approved Document B sets reasonable standards by reference to both the European (EN) and British (BS) test and classification systems. The appropriate classification varies in the guidance depending on the location of the wall lining and either system of classification can be used.

16. However the main provisions of the EU Construction Products Regulation (305/2011) will take effect from 1 July 2013 in the UK. From this date, manufacturers of wall coverings will have to test and label their products in accordance with harmonised European standards and classification systems before they place them on the market. The primary objective of this is to establish a “common language” for specifying the essential characteristics of construction products rather than to restrict the use of any particular products.

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[1] Future changes to the Building regulation – next steps. Published by DCLG in December 2010. Available at www.communities.gov.uk/publications/planningandbuilding/buildingregsnextsteps

[2] http://www.planningportal.gov.uk/uploads/br/BREG_Report_127687.pdf, page 31

17. The Guidance in Approved Document B currently calls for wall linings in the corridors and other circulation spaces of non domestic buildings to be rated as either “Class O” under the British Standard classification system or “Class B” under the European system.

18. At present most decorative wall coverings for use in non domestic applications are rated as “Class O” under the British Standard classification system and would be acceptable for use in corridors and other circulation spaces. However, evidence suggests that the same product would tend to be rated as “Class C” or even “Class D” under the European classification system and, under the current guidance in Approved Document B, would not be permitted in those locations. This is a problem peculiar to thin wall coverings such as wall papers and does not manifest itself for other lining products subject to the same guidance.

19. This has not been a problem to date, as use of the European standards and CE marking labelling system has been voluntary in the UK. CE marking of these products becomes mandatory in 2013 at which point the issues highlighted will become more of a significant issue. A building control officer *could* choose to accept a product achieving “Class 0” under the British System despite a European classification of “Class C” rather than “Class B”, but this would be a matter of discretion. Furthermore, industry has expressed significant and valid concerns that professionals responsible for specifying materials required would tend towards products classified as “Class B” under the European system in order to ensure compliance.

20. It should be noted that the proposed amendments are not intended to reduce standards of safety and would not change the need to CE mark products in accordance with the Construction Products Regulation. However it is possible to mitigate some of the unintended consequences of imposing the European classification system by amending our own national provisions.

Response to the Public Consultation

21. The policy proposals received support in the consultation. 88% of respondents to the consultation agreed that proposals around wall coverings would indeed maintain the necessary standards of fire safety. 82% of respondents to the consultation agreed that the proposals around lighting diffusers would maintain the necessary standards of fire safety.

22. The majority of respondents could not provide additional evidence to support assessment of the impact of the policy, although some useful information regarding the costs of producing more fire resistant wall covering products was provided and has helped to develop the evidence base.

23. A number of respondents indicated their support for using a diagram in the approved document to illustrate the restrictions on spacing of lighting diffuser with the caveat that the diagram required a clear key to aid interpretation. This feedback has been taken on board for the final Approved Document.

Additional Research informing the Final Impact Assessment

24. As well as the results of the consultation this final stage impact assessment also benefits from the publication of a technical research report published by the Department alongside the consultation and two further pieces of research, one carried out by Exova Warrington Fire on fire performance of wall coverings, and a second commissioned by the Department looking specifically at the cost-benefit case on lighting diffusers.

25. During the consultation the Department published a research report commissioned from BRE[3], which analysed the fire safety performance of six wall coverings according to the British and European testing systems. Unfortunately the report was inconclusive; in the first set of testing on standard plasterboard substrate all six products selected actually failed to achieve British “Class 0”, (which would be a requirement of the Building Regulations for their use in circulation spaces) although they performed better when tested on a backing of calcium silicate board. In the latter scenario for the one product which recorded a “Class 0” according to the British system a European “Class C” was recorded.

[3] The impact of European fire and test classification standards on wallpaper and similar decorative coverings, BRE, 2012, available at: http://www.communities.gov.uk/documents/planningandbuilding/pdf/2107408.pdf

26. The second piece of research was commissioned by the British Coatings Federation, the Association of Interior Specialists and the British Contractor Furnishers Association and conducted by Exova Warrington Fire. The project examined the performance of eight commercial grade decorative wall covering systems. Of the eight products analysed six were classified “Class 0” and two “Class 2” according to the British test system. The two graded “Class 2” and four of the others were classified as European Class C whilst two products classified as “Class 0” under the British System were classified as “Class D” according to the European testing methodology. These results suggest overall that a European “Class C” is the closest equivalent to a British “Class 0”.

27. Requiring a European “Class C” would therefore allow most products currently in common use to continue to be marketed as they are, and would, according to this research, deliver a marginal improvement in fire safety overall. Maintaining the current reference to European Class B would effectively increase provision for fire safety for which a cost-benefit case has not been made.

28. Most other European countries would allow European “Class C” for use in corridors and circulation spaces, so the policy approach provides for greater consistency in terms of use and application of products in the single market, alongside a common system of testing and labelling.

Policy objective;

29. To simplify and update the guidance supporting Requirement B2 to ensure that unnecessary burdens associated with compliance are avoided whilst maintaining adequate standards of safety

Description of options considered;

Option 0 – Do Nothing

A ‘do nothing’ option would lead to continued use of polycarbonate lighting diffusers despite evidence that significant savings could be delivered by allowing acrylic lighting diffusers whilst maintaining an appropriate degree of fire safety. There could be unintended consequences, in terms of increased costs to industry, if current requirements on wall coverings are not amended in advance of construction product marking becoming mandatory in 2013.

Option 1 - Amend the Guidance Supporting Requirement B2

The policy option being taken forward is simplification of the guidance in Approved Document B for Lighting Diffusers and Wall Coverings. The costs and benefits of policy are considered in this impact assessment against a counterfactual ‘do-nothing’ scenario. The policy will reduce costs for business whilst maintaining an appropriate standard of fire safety.

Monetised and non-monetised costs and benefits of the chosen policy

Costs

30. As with any change to Building Regulations Guidance there will be some transitional costs associated with users of the guidance familiarising themselves with the changes. Given the very limited nature of these proposals we do not consider that any additional training would be required and it is most likely that professionals will familiarise themselves with the changes when they come to use it for the first time.

Lighting Diffusers

31. Transition costs have been estimated as approximately £3m. This assumes that around 30% of 197,400 electrical engineers will have to spend one hour familiarising themselves with the new guidance, equivalent to around one engineer per electrical firm[4], and 4500 building control professionals will similarly have to spend one hour. In reality some firms will specialise in commercial installations and every staff member will need to become familiar with the new guidance and some firms will avoid such work and might only need to familiarise themselves with the guidance at the point of doing a commercial job.

32. Estimates of hourly costs are based on two sources, the EC Harris database of professional fees and from the Annual Survey of Hours and Earnings[5]. Hourly rates have been calculated for the central case by attaching a 50% weighting to wage rates from the EC Harris professional fees database and a 50% weight to wage rates derived from the Annual Survey of Hours and Earnings[6]. This leads to estimated hourly rates of £46.5 for electrical engineers and £42 for building control professionals.

33. The EC Harris database has been used as a source of evidence on the cost for workers in the construction industry. This reflects the value by the market of a professional including wage, on costs and other business costs to the organisation. This approach is widely used in the construction industry. However, there is a risk that this may overstate the cost savings. For instance in some situations, the saving may result in the professional being employed for fewer hours and delivering less than the full business cost savings assumed in the charge out rates. We have therefore also used the Standard Cost Model to estimate costs based upon the Annual Survey of Hours and Earnings (ASHE) plus an additional estimate of 30% for additional overheads such as pension contributions and national insurance contributions . It is our assessment that this approach underestimates typical benefits of time for professionals in the construction industry.

34. So for our central estimate we have assumed an hourly rate half way between the EC Harris industry estimate and the ASHE plus 30% approach. We feel this estimate reasonably reflects that some time savings of key professionals have a high value reflected in the charge out rate for carrying out other priorities while in other situations the business cost saving might be more constrained.

35. To reflect the uncertainty over how long professionals will be required to spend familiarising themselves with the new arrangements we have assumed that only 30 mins is spent in the low cost scenario and 90 minutes in the high cost scenario.

36. The results of the consultation supported the view that the relaxation would still deliver an 'equivalent or better' level of fire safety[7] therefore there are no ongoing costs of the policy in terms of impact on fire safety.

Table 1 – Transitional Cost Assumptions

	Number	Proportion	Hourly Rate (low/central/high) £/hr	Number of Hours (low/central/high)
Electrical Engineers	197,400	30%	29 / 47 / 64	0.5/1/1.5
Building Control Surveyors	4,500	100%	24 / 42 / 60	0.5/1/1.5

Source: Adroit Economics

Table 2 – Transition costs

	Low cost	Central	High cost
Electrical Engineers	£ 858,690	£ 2,753,730	£ 5,685,120
Building Control Surveyors	£ 54,000	£ 189,000	£ 405,000

[4] Number of professionals based on EC Harris estimates. Number of electrical contracting firms based on data used for Part P impact assessment (39,000 firms registered with competent persons plus an estimated 20,000 not registered), see http://www.communities.gov.uk/documents/planningandbuilding/pdf/157248.pdf.

[5] ONS, ASHE, 2012, http://www.ons.gov.uk/ons/rel/ashe/annual-survey-of-hours-and-earnings/ashe-results-2011/ashe-statistical-bulletin-2011.htm

[6] Estimates from the ASHE have been up-rated by 30% to allow for pensions, national insurance contributions and other variable costs of labour employment (see Standard Cost Model, BERR, 2005, http://www.berr.gov.uk/files/file44503.pdf)

[7] http://www.planningportal.gov.uk/uploads/br/BREG_Report_127687.pdf, page 31

Total	**£ 912,690**	**£ 2,942,730**	**£ 6,090,120**

Wall Coverings

37. The proposed amendments to the guidance are designed to ensure that those products which are currently used will remain acceptable and therefore there are no transitional costs associated with this proposal.

38. In the counterfactual scenario over the longer term, greater use of European "Class B" products or reduced use of wall coverings altogether could result. However, the consultation has supported the view that any fire safety benefits resulting from increased use of European Class B products would be marginal.

39. The BRE report noted that 'fire statistics do not contain sufficient detail to evaluate whether or not any wall coverings specifically contributed to fires'. The report also suggested that fires originating in circulation spaces were uncommon (<10%) and that the proportion of fires that spread from the room of origin was low (10-20%). The annual life-safety cost of all fires in relevant building types which started in circulation space (e.g. corridor) or were spread beyond the room of origin was estimated at £118m per annum. A DCLG review of the fire incident response database has identified that wall coverings are not separately identified from other fixtures and fittings in determining the spread of fire.

Benefits

Lighting Diffusers

40. There are two classes of diffuser material; TPa and TPb. Current guidance on the spacing of TPb lighting diffusers tends to drive designers to use TPa materials which perform better in fire but worse than TPb in terms of lighting efficiency. As a result more light fittings are used to deliver the required degree of illumination.

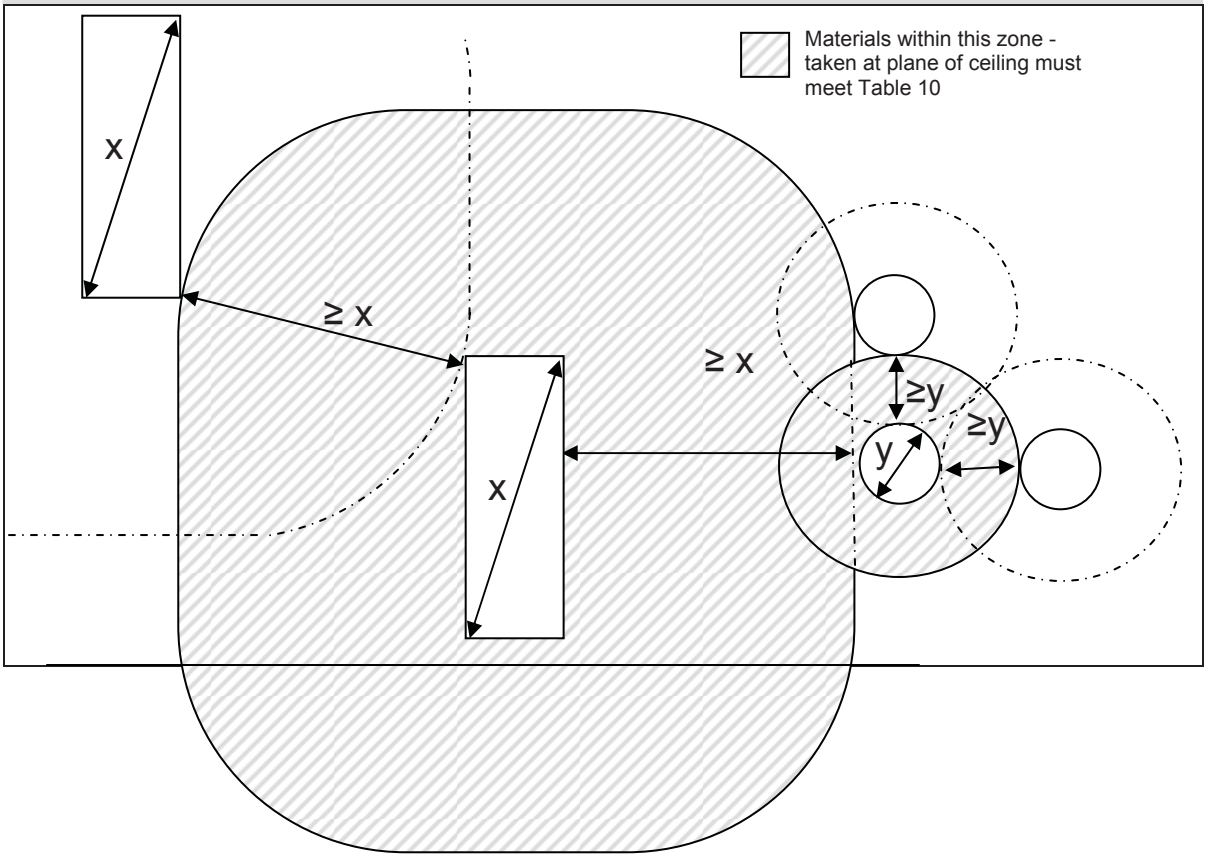
41. Current guidance provides for the unlimited use of TPa products but restricts TPb products to a maximum total area of 15% of ceiling area in circulation spaces and to 50% in rooms. In addition, individual panels or groups of panels are limited to a maximum size of 5m2 and must be located a minimum of 3m apart. The amended guidance retains the limits on total area but provides a reduced spacing requirement, shown in Diagram 28 of Approved Document B and reproduced below, for panels that are less than 1m2.

42. As shown in Diagram 28 the spacing requirement is reduced so that minimum distance between two rectangular diffusers must be no less than the length of the diagonal of the diffuser. Since a typical diffuser would have a diagonal length of less than one metre this allows the diffusers to be placed more closely together than the current three metre minimum. For circular diffusers the minimum separation between diffusers must be greater than the diameter of the diffusers.

43. The proposed changes to the guidance on spacing of TPb diffusers will allow designers to achieve the desired light level with slightly less units. The TPb diffusers would typically be further apart than the TPa diffusers which are currently widely used but closer together than is currently allowed for TPb diffusers. There is no significant cost difference between the two materials.

Fig 1 – Diagram 28 of Approved Document B

Diagram 28 of Approved Document B: **Layout restrictions on small Class 3 plastic roof lights, TP(b) roof lights and lighting diffusers**



44. The potential savings are illustrated in figures 2 and 3 for a small commercial office. The top panel shows the optimal layout of luminaires to achieve the required level of illumination with the TP(a) polycarbonate diffusers. The bottom panel shows the optimal layout using the more efficient TP(b) acrylic diffusers. This layout could not be used currently due to restrictions in Approved Document B, but would be allowed under the new policy. As can be seen, the new optimal layout would deliver the required levels of illumination with fewer light fittings.

45. At consultation stage we estimated that around 15% less fittings would be necessary if the more efficient TPb materials could be more widely used.

46. At consultation stage estimates were presented on the basis of annual sales of the relevant light fitting (3m to 7m per annum) and the average installed cost (£45). Assuming that 80% of potential benefits were realised the year 1 benefit of the policy was estimated to be £27m and the present value benefit over ten years to be £232m.

Fig 2 – Illustrative optimal lighting layout with TP(a) polycarbonate diffuser

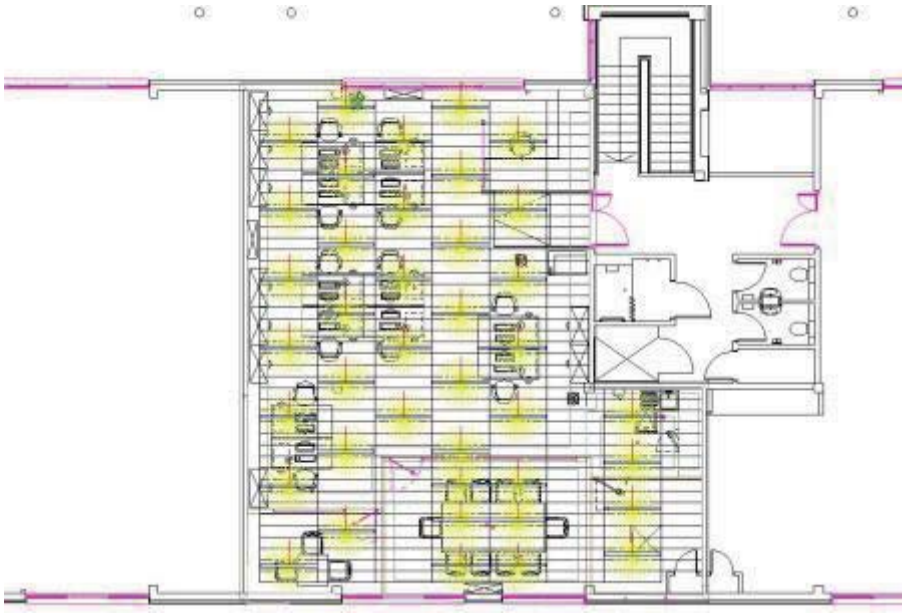
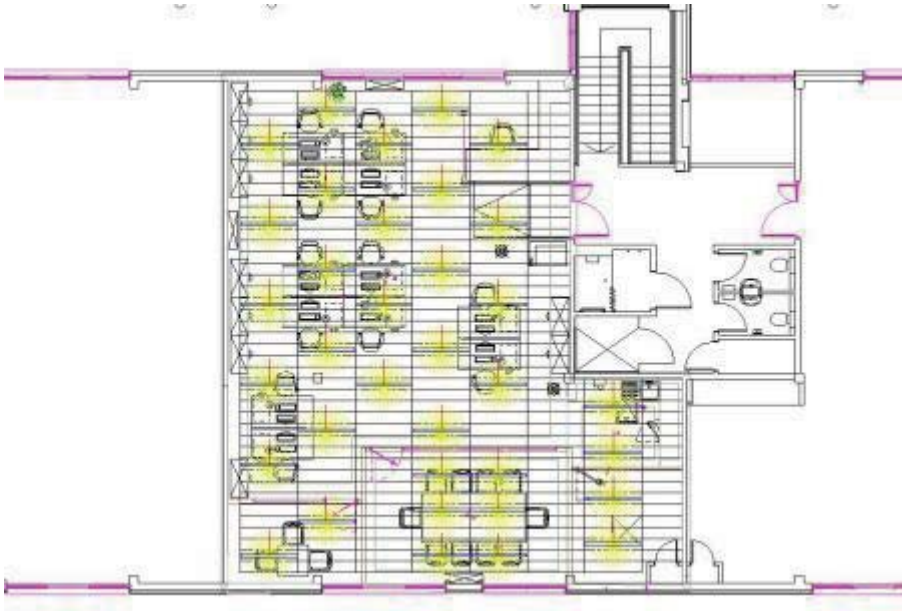


Fig 3 – Illustrative optimal lighting layout with TP(b) acrylic diffuser



47. To strengthen the evidence base DCLG commissioned EC Harris in conjunction with Hyder Consulting and Adroit Economics to further investigate how the proposals might be adopted in practice[8]. The key aspect of this research performed by Hyder Consulting considered lighting installations in seven notional building types and how the new guidance would change the optimal lighting installation in each case, looking at:

    - Small offices, shallow plan, less than 250m^2
    - Medium offices, shallow plan, 250m^2 to 1000m^2
    - Large offices, shallow plan, 1000m^2 +
    - Deep plan offices, 5098m^2 +
    - Retail premises
    - Educational premises
    - Health care centres

48. The work considered whether the revised guidance would allow a reduced number of light fittings in the optimal design. EC Harris and Adroit Economics then estimated both the capital cost savings and the ongoing energy savings from the policy.

49. Hyder's report analysed the number of light fittings required to deliver the required degree of illumination in different parts of the notional building (desk areas, kitchen areas, corridors, reception areas and meeting rooms) according to relevant British Standards and guidance from the Chartered Institute of Building Service Engineers, using the both polycarbonate TP(a) and acrylic TP(b) diffusers and the spacing requirements outlined above. The calculation is performed using specialist software that uses an example layout of the notional building to calculate the optimum number of lighting diffusers (as used by designers in actual projects).

50. The software requires a variety of input assumptions to be made and values standard to this type of calculation have been assumed throughout.

    - 2250 hours of daytime usage per year (250 working days with 9 hours of daytime usage per day)
    - 250 hours of night-time usage per year
    - Occupancy dependency factor of 0.90 to reflect the fact that the building will not be fully occupied all the time
    - 2.5m internal room height
    - Emergency lighting excluded from calculations
    - Windows not taken into account
    - Desks 0.75m high[9]

51. For new installations, the potential reduction in the number of luminaires required is illustrated in table 3. The savings are greatest for deep plan offices, since these have the greatest desk area (where the brightest lighting is required by the guidance to aid reading and writing) and the additional performance of TP(b) materials is therefore most beneficial. The reduction in the number of luminaries in the optimal installation ranges from 13% to 25% dependent on the size of the office. This is consistent with the broad estimate made at consultation stage that the amendment would deliver a 15% reduction in the number of luminaires.

[8] EC Harris, Adroit Economics, Hyder Consulting, Lighting Diffusers Final Report

[9] Additional assumptions available in the report itself (e.g. regarding reflectance of different surfaces)

Table 3 – Lighting layouts in a new build project under the amended regulations

	No. Luminaires (polycarbonate)	No. Luminaires (acrylic)	Reduction due to amendment	Reduction due to amendment
Small Offices	40	35	5	-13%
Medium Offices	202	171	31	-15%
Large Offices	289	234	55	-19%
Deep Plan Offices	1,497	1,123	374	-25%
Schools				
1x35W linear fluorescent	120	130	10	8%
2x35W linear fluorescent	76	60	16	-21%

Source: EC Harris, Hyder Consulting

52. For refurbishment installations the potential reduction in the number of luminaires when the lighting layout is reconfigured is the same. No saving is anticipated for refurbishment of educational premises. Some refurbishment projects will reconfigure the ceiling layout and some will continue using the existing layout; where the existing layout is retained the amendment of Approved Document B will not deliver any savings. For the purposes of the report the consultants have assumed that 50% of refurbishment projects will include a new ceiling and lighting installation an assumption that is utilised in this impact assessment also.

53. One of the key findings of the research is the estimated cost of the lighting diffuser panels; in the consultation stage impact assessment we assumed £45 per fitting. The EC Harris report establishes a cost of £260 per lighting diffuser and is based on prices sourced from industry suppliers for the specific purpose of the lighting installations in question. For commercial projects, the designers have advised that £260 reflects the average cost of a diffuser suitable for use in typical office installations.

54. New installations have been costed on the basis that each fitting costs £20 to install covering both labour and the materials necessary for the installation. For refurbishment projects where the layout is maintained in the existing format the installed cost is £270 (covering materials and installation with no amendment to the wiring) and where the layout is modified the estimated cost is £285 as more modification of the wiring may be required. Capital cost savings for new installations have been calculated based on the reduction in the number of luminaires and the estimated installed cost of the light fittings as shown in table 4. The amended layout for refurbished schools was not found to be cost effective and so have not been included in Table 5.

Table 4 – Capital cost savings for new lighting installations

	Existing Regulation		Amended Regulation		
	Luminaires	Rate	Luminaires	Rate	Cost Difference
Small Offices	40	£280	35	£280	£1,400
Medium Offices	202	£280	171	£280	£8,680
Large Offices	289	£280	234	£280	£15,400
Deep Plan Offices	1,497	£280	1,123	£280	£104,720
Schools					
1x35W linear fluorescent	120	£128	130	£132	-£1,825
2x35W linear fluorescent	76	£136	60	£139	£1,987
Subtotal					£162

Source: EC Harris

Table 5 – Capital cost savings for refurbished lighting installations

	Existing Regulation		Amended Regulation		
	Luminaires	Rate	Luminaires	Rate	Cost Difference
Small Offices	40	£270	35	£285	-£825
Medium Offices	202	£270	171	£285	-£5,805
Large Offices	289	£270	234	£285	-£11,340

Deep Plan Offices	1,497	£270	1,123	£285	-£84,135

Source: EC Harris

55. The policy will also deliver a significant energy saving over the lifetime of the life fitting. The average life of a lighting diffuser is 10-15 years, so the energy savings from each building constructed under the amended guidance are valued over the lifetime of the light fitting and discounted to 2013.

56. The lighting installation software generates energy use statistics for each installation based on the assumptions set out in paragraph 45. The energy use of the installation is calculated from the wattage of the bulbs (49W) multiplied by the assumed annual usage (2500 hours). The optimal configuration of both types of lighting diffuser uses lamps of the same wattage and therefore the saving comes purely from the reduction in the number of luminaires required. The savings for the different notional building types are shown in table 6.

Table 6 – Energy Savings – per annum

New Installation Option 1 - 49W T5 Fluorescent Acrylic Diffuser			
	Existing Regulation (Polycarbonate 49W) (kWh/yr)	**New Regulation (Acrylic 49W) (kWh/yr)**	**Energy Consumption Saving (kWh/yr)**
Small offices	4,905.00	4,291.88	-613.12
Medium offices	24,770.25	20,968.88	-3,801.37
Large offices	35,438.63	28,694.25	-6,744.38
Deep Plan Offices	183,569.63	137,707.08	-45,862.55
Schools	23,355.00	22,059.00	-1,296.00

Source: EC Harris

57. The energy savings are valued using forecast electricity prices, in pence per kWh, as published by the Department for Energy and Climate Change (DECC)[10]. To reflect the uncertainty over future electricity prices the modelling in the IA uses the low/central/high electricity prices respectively for the relevant scenario of the IA. For the main social cost benefit analysis the variable element is used, as per DECC guidance. This takes the full retail energy price saving to the occupant and then nets off what are in effect 'transfer payments' - those fixed costs in the energy supply which will still need to be borne by other consumers and the loss of tax revenue to the government exchequer. The direct costs to business are considered in detail at paragraph 73 onwards using the retail energy price, since this is the fuel bill saving for business delivered by the policy. Forecast energy prices for the three scenarios are shown in Annex A. The annual energy savings for each build type for the first year are shown in table 7.

Table 7 – Value of Energy savings (£ per annum)

Energy Savings (£ per annum)	Low electricity price	Central electricity price	High electricity price
Small offices	-40	-57	-61
Medium offices	-247	-355	-379
Large offices	-438	-629	-672
Deep Plan Offices	-2,979	-4,280	-4,571
Schools	-84	-121	-129

58. The reduction in electricity demand will also deliver a carbon saving. This is calculated using marginal electricity emission factors taken from DECC guidance and valued in table 9 using low/central/high projected carbon prices as published by DECC. For 2013 the marginal electricity emission factor is 0.3735 kgCO_2/kWh.

[10] http://www.decc.gov.uk/en/content/cms/about/ec_social_res/iag_guidance/iag_guidance.aspx

Table 8 – Carbon Savings (tonnes per annum)

Carbon Savings (tonnes)	Carbon savings - tonnes
Small offices	0.23
Medium offices	1.42
Large offices	2.52
Deep Plan Offices	17.13
Schools	0.48

Table 9 - Value of Carbon Savings (£) per annum

Value of carbon savings (£)	Low carbon price	Central carbon price	High carbon price
Small offices	2	4	5
Medium offices	12	23	28
Large offices	22	40	50
Deep Plan Offices	151	272	342
Schools	4	8	10

59. To translate the savings set out into a national figure assumptions must be made about the rate of development of new commercial buildings and frequency of refurbishment of existing buildings.

60. There is uncertainty over future build rates and no official projections exist for non-domestic buildings, therefore three reasonable scenarios are modelled. The approach taken is to examine the stock of existing buildings by floor space and, based on assumed building lifetimes, to calculate how many new buildings would be expected. Consistent with the Part L Impact Assessment the central scenario uses a building lifetime of 60 years. In the low scenario 80 years is assumed and in the high scenario 40 years is assumed. The analysis assumes that buildings are refurbished every 10/15/20 years in the low/central/high scenario.

61. To validate these assumptions several further sources have been considered. Adroit Economics analysis of the ONS construction statistics suggests that in the order of 3600 new commercial units are developed per year[11]. The DCLG publication 'Baseline Key Performance Indicators' for the Sustainable and Secure Buildings Act presents data that 3,674,000 sq m of new commercial and retail floorspace was built in 2005-2006; if this is assumed to be built to the same proportions as the existing stock this would suggest around 4000 new commercial buildings per year. Furthermore, planning statistics collected by DCLG suggest 3,387 major and minor office developments in the year to March 2011[12]. These three sources help to confirm that the estimates presented below are a reasonable representation of construction rates for the different building typologies, particularly given the volatility of investment and construction over time. The stock estimate for commercial offices below excludes local government and the central government estate, which have not been monetised so the total is appropriate in assessing the impact on business. The central scenario is reasonably cautious, which is appropriate for quantifying the impact of a regulatory 'OUT'.

Table 10 – Build rate Assumptions

Building type	Stock of existing non-domestic buildings	Build rate - low	Build rate - central	Build rate - high
Small commercial office (<250 m^2)	201,113	1.25%	1.67%	2.50%
Med. commercial office (250-1000m^2)	40,613	1.25%	1.67%	2.50%
Large commercial office (1000m^{2+})	6,237	1.25%	1.67%	2.50%

[11] Adroit Economics: CBA of Proposed Changes to Lighting Diffusers, available at [WEBLINK]. ONS construction statistics are available at: http://www.ons.gov.uk/ons/taxonomy/search/index.html?newquery=*&nscl=Building+and+Construction&nscl-orig=Building+and+Construction&content-type=publicationContentTypes&sortDirection=DESCENDING&sortBy=pubdate

[12] http://www.communities.gov.uk/documents/statistics/xls/1929704.xls

Deep plan office (2500m^{2+})	3030	1.25%	1.67%	2.50%

Table 11 – Build rate assumptions

Build rate	Low	Central	High
Small commercial offices	1890	2363	3151
Medium commercial offices	477	636	954
Large commercial offices	73	98	147
Deep plan offices	36	47	71
Schools	200	200	200

62. These build rates, combined with the information from table 4 and 5 on the number of luminaires required in different circumstances suggest a total number of light fittings for these environments of around 1.3-2.6 million.

63. Table 12 shows an illustration of all the savings in the central build rate scenario for new buildings only. The energy and carbon savings accumulate as more buildings are built to the more efficient design. For example, in year 2, the energy and carbon savings are counted for all buildings that were built to the new design in year 1 and those in year 2. In Annex B equivalent calculations are presented for refurbishment projects and for the low and high scenarios.

64. The analysis assumes that 65% of projects adopt the more efficient lighting design, rather than 80% as assumed in the consultation, on the basis of advice from Hyder Consulting. This takes into account the fact that some buildings are designed in such a way that the savings are not possible, or not possible to the same extent, and that some projects will choose alternative lighting solutions. This is believed to be a reasonable assumption based on current experience for at least the next five years, after which the picture becomes more uncertain as it is dependent on technological developments. After the first five years of the policy the proportion of projects for which savings are applicable is reduced by 5% each year to reflect the fact that other lighting technologies could potentially become more important over this time frame[13]. In the low scenario the analysis assumes that only 50% of projects benefit from the savings and this is reduced by 10% per annum after the first five years. In the high scenario we have assumed that 65% of projects continue to benefit from the savings over the entire ten year lifetime of the policy.

65. To reflect uncertainty in the low scenario the analysis assumes that only 50% of projects benefit from the savings and this is reduced by 10% per annum after the first five years. In the high scenario we have assumed that 65% of projects continue to benefit from the savings over the entire ten year lifetime of the policy.

66. Table 12 shows the capital energy and carbon savings generated by the policy. We have only included the benefits of capital or energy savings occurring within the ten year policy window but there are likely to be additional energy and carbon benefits occurring outside this window as a result of the policy action. This means the estimated NPV of the policy is conservative.

67. Table 12 shows the capital, energy and carbon savings estimated for new buildings in the central build scenario. Equivalent calculations have been performed for refurbishment properties and for the low and high build scenarios; detailed tables equivalent to table 12 are presented in Annex B. The summary results of this analysis are collected together in table 13.

68. The total carbon saving from the policy is estimated to be 0.6 $MtCO_2$ over the lifetime of the installations.

69.

Table 12 – Capital, energy and carbon savings for new buildings, central build rate

Savings for New Buildings - Central build rate				
Year	Capital cost saving (£)	Energy Saving (£)	Carbon Saving (£)	Total (£)
2013	9,981,654	430,260	27,377	10,439,292
2014	9,981,654	845,996	58,832	10,886,482
2015	9,981,654	1,269,114	97,553	11,348,321
2016	9,981,654	1,703,588	141,311	11,826,554
2017	9,981,654	2,132,902	188,562	12,303,119
2018	9,981,654	2,449,352	239,733	12,670,740
2019	9,981,654	2,815,489	299,648	13,096,791
2020	9,981,654	3,214,756	370,381	13,566,792
2021	9,981,654	3,684,408	469,145	14,135,208
2022	9,981,654	4,048,751	573,811	14,604,217
2023	-	4,081,575	643,401	4,724,976
2024	-	4,319,509	712,992	5,032,500
2025	-	4,202,842	738,349	4,941,190
2026	-	3,726,746	665,105	4,391,851
2027	-	3,328,166	581,712	3,909,878
2028	-	2,844,398	491,007	3,335,405
2029	-	2,338,153	395,830	2,733,983
2030	-	1,870,644	302,458	2,173,102
2031	-	1,381,726	223,148	1,604,874
2032	-	935,322	148,464	1,083,785
2033	-	531,433	81,510	612,942
2034	-	170,059	24,733	194,792
NPV	**85,918,952**	**37,216,824**	**5,139,054**	**128,274,831**

70. Table 12 shows the capital, energy and carbon savings estimated for new buildings in the low build scenario. Equivalent calculations have been performed for refurbishment properties and for the low and high build scenarios (detailed tables in Annex B) and the summary results are reported in table 13[14]. As explained above, the £37.2m energy saving is calculated using the variable energy price to give the net benefit to society from saving energy. The retail price benefit is estimated to be £58.7m. This includes the value of saved carbon ETS permits, estimated at £5.1m, which is already valued separately above. It also includes transfer payments such as fixed costs in the energy system, which will still need to be funded by consumers, plus reduced tax revenue to the government exchequer, together totalling an estimated £16.4m. These are subtracted from the retail energy price to give the variable energy price, used to estimate the overall impact on society.

71. Capital cost savings here are estimated to be £100-£300m. This is lower than the estimate made for the consultation stage impact assessment of £120-£430m, which is reasonable since the research highlighted that savings were only achievable for particular building types. The overall benefits of the policy are higher in this final stage impact assessment because the energy and carbon savings have also been considered.

Table 13 – Benefits of the amended regulations (£2012, annual equivalent values and present value over 10 year policy lifetime[15])

	Low	Central	High
annual equivalent benefit - new build	£ 3,645672	£ 7,519,760	£ 12,953,701
annual equivalent benefit - refurb	£ 6,083,606	£ 14,967,901	£ 23,992,202
Present value benefit – new build	£ 62,189,230	£ 128,274,831	£ 220,968,965

[14] For further detail on the methodology see the Adroit Economics report.

[15] Energy savings are considered over the lifetime of the lighting diffuser, 12.5 years.

Present value benefit – refurb	£	103,776,394	£	255,327,960	£	409,267,796
PV benefits	**£**	**165,965,624**	**£**	**383,602,792**	**£**	**630,236,761**

72. There is a potential overlap between energy savings achieved from this policy and the requirements of Part L of the Building Regulations which deals specifically with energy efficiency. Buildings must achieve equivalent or better energy performance relative to the target emission rate derived from the notional building of the same size produced by the SBEM modelling software. At the margin, installing these more efficient lighting technologies will save energy with result that a builder might avoid having to install solar PV panels or some other form of abatement technology or renewable energy generation. In this case it might be more appropriate to value the avoided capital costs of the renewable installation as opposed to the energy savings. The capital cost savings would depend on the cost of the marginal technology required to achieve the notional building standard in any specific case (potentially Solar PV). However, this would all be dependent on whether the notional building would be modified to take into account the amendments to Part B of the Building Regulations which we have assumed will be the case in the future. In such a situation this change would not affect the other energy saving improvements required to meet the Part L standard. For this reason we have valued the energy savings as a result of this policy change directly in this IA.

Wall Coverings

73. The amendments to Approved Document B will reduce costs to industry, since it avoids the additional cost associated with producing European "Class B" products.

74. The proposed amendments to the guidance are designed to ensure that those products which are currently acceptable for use will remain acceptable without modification. However, if the proposed changes are not taken forward then it may no longer be possible to use certain products and more expensive alternatives may need to be used instead. Information received from the British Coatings Federation prior to the consultation estimated the value of sales of commercial wall coverings to be between £25 to £28 million a year and estimated that manufacturing costs could increase by between 10% and 20% if these changes are not taken forward.

75. Further information received from Muraspec in response to the consultation indicated that European "Class B" would need to be sold at a price nearly 60% above that of products built to British "Class 0" and that the size of the UK wall coverings market was around £40 million (although only 35% of the total market, in volume terms, would be subject to the requirements of Part B of the Building Regulations for use in circulation spaces). The information provided indicated that with an additional primer coating Class B products could be produced, although at a cost around 29% higher than the current cost.

76. For the purposes of estimating the costs for the impact assessment we focus on the additional production costs associated with producing Class B rather than Class C wall coverings; this is the burden avoided by amending Approved Document B. Implicitly this assumes that all manufacturers would switch to producing European Class B products. The effects of product switching are not taken account of here; the ultimate impact of keeping a European requirement of Class B would be felt through a reduction in demand for heavy duty wall coverings as potential buyers switch to alternative means of interior decoration but the cost increase provides a reasonable way of approximating the impact.

77. Case study evidence submitted to the department suggests that where UK firms have marketed Euroclass B products demand has been extremely low, although we have allowed for there being some demand for Euroclass B products currently by assuming 0%/5%/10% use of Euroclass B in the baseline.

Table 14: Benefits of amending Part B to reference European Class C for wall coverings

	Low	Central	High
Total market value of heavy duty wall coverings	£ 25,000,000	£ 32,500,000	£ 40,000,000
- of which 35% estimated to be Part B Relevant (in corridor spaces etc.)	£ 8,750,000	£ 11,375,000	£ 14,000,000
% of market choosing Euroclass B in	0%	5%	10%

baseline			
% cost increase (European class B vs European class C)	10.00%	20.00%	30.00%
Annual benefits of Part B amendments (cost increase averted)	£ 875,000	£ 2,161,250	£ 3,780,000
NPV (10 years)	£ 7,531,726	£ 18,603,362	£ 32,537,055

78. The estimated benefits of referencing European Class C for wall coverings rather than the currently mandated European Class B are therefore £0.9m to £3.8 million per year. The central estimate is £2.2m per annum giving a present value of **£18.6m**.

Summary of Costs and Benefits

79. The two elements of this impact assessment together deliver a net present benefit of **£399.3m** (with a ten year policy period and energy savings considered over the lifetime of the light fitting.)

Table 15 – Summary table of Costs and Benefits (2012 prices)

LIGHTING DIFFUSERS			
	Low	Central	High
New build - average annual benefit	£ 3,645672	£ 7,519,760	£ 12,953,701
Refurbishments – average annual benefit	£ 6,083,606	£ 14,967,901	£ 23,992,202
New build (present value)	£ 62,189,230	£ 128,274,831	£ 220,968,965
Refurbishments (present value)	£ 103,776,394	£ 255,327,960	£ 409,267,796
Present value benefit	**£ 165,965,624**	**£ 383,602,792**	**£ 630,236,761**
WALL COVERINGS			
Average annual	£ 875,000	£ 2,161,250	£ 3,780,000
PV (10 years)	£ 7,531,726	£ 18,603,362	£ 32,537,055
TOTAL			
PV Benefit	£ 173,497,349	£ 402,206,154	£ 662,773,816
PV Cost	-£ 6,090,120	-£ 2,942,730	-£ 912,690
Net present value	£ 167,407,229	£ 399,263,424	£ 661,861,126

Risks and assumptions

80. The estimated impact of the policy has been refined significantly since the consultation stage assessment on the basis of additional research conducted by EC Harris, Adroit Economics and Hyder Consulting. The final assessment of the deregulatory benefit of amending Part B is larger; we believe this is reasonable, both because it is underpinned by detailed work assessing the lighting installations required in different commercial buildings and because the work has been furthered by considering the energy and carbon savings resulting from the policy in addition to any capital savings.

81. However, there are still a number of important uncertainties. The number of new buildings per annum is unknown and has thus been reflected by the use of a broad range reflecting a plausible high and low scenario. The estimated number of new projects has also been compared to various other sources including ONS statistics, planning statistics and work performed for the Energy Performance of Building Directive Regulatory Impact Assessment strengthening the case for the build rates that have been assumed.

82. The proportion of buildings for which the savings estimates are valid is the other important unknown (some building designs might not lend themselves to the different layouts and some will choose alternative lighting technologies). 65% has been selected on the advice of the consultant team (see Adroit Economics report), representing a decrease from the 80% assumed at consultation. This is thought to be an accurate estimate based on current installations for at least the next five years. In the central scenario, after this time, we assume that 5% less projects are able to achieve the savings as other lighting technologies become more viable alternatives. The uncertainty associated with this is captured in the low and high scenarios' in the low scenario only 50% of projects achieve the savings and this falls at 10% per annum thereafter.

Sensitivity Testing

83. The low and high scenarios considered in the impact assessment reflect the primary uncertainty over future new build rates and the additional uncertainties from the lifetime of the light fitting, the applicability of the savings and future energy and carbon prices. Thus most of the main uncertainties have been taken into account in the three scenarios presented.

84. The value of the individual lights fittings is an important variable. We have used £260 per fitting throughout the analysis as this is the cost sourced by Hyder Consulting as a representative unit suitable for use in commercial buildings. Were the light fitting to cost £45 as we estimated at consultation, instead of £260, the present value benefits from light fittings would be reduced from £393m to £158m. However, £45 was at the very low end of the possible cost of such fittings and not representative of a unit suitable for use in a commercial office building nor the range of potential options available for such use (with many options available at a cost much higher than £260).

Direct costs and benefits to business calculations (following OIOO methodology);

85. According to OIOO methodology the direct costs and benefits should be reported on an 'annual equivalent' basis in 2009 prices for standardised comparison across policies. There is a significant cost saving for industry generated by the policy. In order to value the saving specifically to business the previous analysis is adjusted to value energy savings at the retail energy price, as per DECC guidance. However, the retail price captures the cost of the Emissions Trading Scheme permits for carbon and so this has been excluded from the business calculation to avoid double counting. The energy savings to business are reproduced in Annex C. This gives a total benefit to business from lighting diffusers of £436.1m.

86. From a social perspective the fixed costs of the electricity supply network are not relevant as the costs will be incurred whether the units are consumed or not. The impact on business though is the full saving on the energy bill. The office savings above are for commercial buildings only so have been included as a benefit to business. We have excluded all schools from the benefit to business calculation.

87. For wall coverings the products in question are not used in domestic buildings but in commercial buildings such as hotels, therefore the full benefits accrue to business (£18.6m). The total benefit to business is therefore £454.7 m. Less the transition costs falling on business of £2.9m[16] the total net benefit to business is **£451.8m**.

88. Annual equivalent benefits have been over the lifetime of the savings, which has been estimated over 25 years based on 10 years of policy and the upper 15 year lifetime of savings estimate. This provides a cautious estimate of the size of the 'OUT'. The annual equivalent benefit in 2012 prices is estimated to be £26.5 million with an annual equivalent cost of £0.2 million and an overall annual equivalent net benefit to business of £26.3 million in 2012 prices (£24.3m in 2009 prices for OIOO).

Table 16 – Direct costs to business (according to 'One-In One-Out' methodology)

Direct costs to business	Central case
AE Cost (£2012)	-164,200
AE Benefit (£2012)	26,484,707
Annual Equivalent Net Benefit to Business (£2012)	26,320,507

[16] Assumes that 25% of the transition costs to building control bodies fall on private sector building control bodies. See DCLG Survey of Building Control, 2008, http://www.communities.gov.uk/publications/planningandbuilding/surveybuildingcontrolrpt

Annual Equivalent Net Benefit to Business (£2009)	24,399,110

Wider impacts

Equalities Impact Test

89. An initial equalities screening of the proposed policy was carried out and determined that a full equalities impact test was not required as the proposal does not adversely affect any minority groups.

Competition Assessment

90. The proposed policy updates the standards that buildings should generally be constructed to. As such it does not make any significant change to how the UK market will operate.

91. On that basis, it is considered that the proposals to change the guidance apply in a proportional and equitable way.

Lighting Diffusers

92. By allowing greater use of a product currently the subject of restrictions, the policy is expected to, if anything, have a small but positive impact on competition. Producers of TP(a) and TP(b) materials will be required to compete vigorously for business and on a more equal footing.

Wall Coverings

93. On wall coverings the policy has a number of impacts on competition. Firms offering British Class 0 products will not be required to reformulate products in order to achieve the necessary European classification; this should foster competition by keeping a wider range of products in the market and reducing fixed costs.

94. Referencing European Class C rather than Class B in the Approved Document would bring England more in line with other EU Member States thus avoiding the need to develop different products for different markets and this will encourage Europe-wide competition in the market.

Small Firms Impact Test

95. The policy change on lighting diffusers should have a positive impact on both small and large firms. Both small and large firms will benefit from the installation cost and energy cost savings over time. Small firms are more likely to benefit indirectly, through reduced energy costs, rather than directly at the point of build.

96. Regarding wall coverings the policy will avoid British suppliers from having to reformulate products to obtain European Class B ratings or remove products from the market. This is likely to be of particular benefit for small firms in the wall coverings market that might have the least capacity to absorb additional fixed costs.

Environmental Impact Tests

97. It has been determined that this policy will result in a reduction in greenhouse gasses being emitted and have no impact on the wider environment. The changes to guidance on Lighting Diffusers will facilitate the wider use of more energy efficient lighting systems. We have estimated the total carbon saving to be 0.6 $MtCO_2$ tonnes of CO_2 over the lifetime of the light fittings.

Social Impact Tests

98. We do not expect the proposal to have any social implications.

Sustainable Development

99. We do not expect the proposal to have any sustainable development implications.

Summary and implementation plan

100. The policy provides reductions in regulatory burdens and facilitates the use of more energy efficient lighting systems without having a detrimental effect on fire safety. This will deliver capital and energy savings to business over the lifetime of the policy.

101. The policy amends references for fire performance standards of heavy duty wall coverings assessed according to the European Classification system, maintaining current levels of fire safety to avoid the unintended consequences of the ‘do nothing’ scenario.

102. Amendments will be made to Approved Document B, coming into force from April 2013.

Annex A: Energy and Carbon Price Assumptions

Forecast variable element electricity price assumptions (as per DECC IAG guidance)

Electricity Prices	Variable element - low (p/kWh)	Variable element - central (p/kWh)	Variable element - high (p/kWh)	Retail - Low (p/kWh)	Retail - central (p/kWh)	Retail - high (p/kWh)
2013	6.50	9.33	9.97	11.13	13.96	14.56
2014	6.67	9.18	9.77	11.44	14.14	14.70
2015	6.58	9.18	9.56	11.14	14.08	14.44
2016	6.33	9.24	9.56	10.96	14.34	14.64
2017	6.49	9.25	10.03	11.19	14.50	15.24
2018	6.36	8.97	10.06	11.10	14.42	15.44
2019	6.67	9.02	10.51	11.46	14.72	16.11
2020	7.23	9.25	10.68	12.05	15.22	16.56
2021	7.56	9.71	11.02	12.32	15.83	17.06
2022	7.93	9.93	11.21	12.72	16.06	17.27
2023	7.70	10.01	11.37	12.52	16.15	17.44
2024	8.42	10.59	11.94	13.25	16.73	17.99
2025	8.83	10.92	12.23	13.69	17.10	18.33
2026	9.09	11.00	12.24	13.96	17.20	18.37
2027	9.18	11.38	12.52	14.06	17.56	18.64
2028	9.38	11.54	12.66	14.13	17.58	18.63
2029	9.43	11.67	12.80	14.08	17.61	18.67
2030	9.71	11.99	13.10	14.20	17.81	18.85
2031	9.71	11.99	13.10	14.20	17.81	18.85
2032	9.71	11.99	13.10	14.20	17.81	18.85
2033	9.71	11.99	13.10	14.20	17.81	18.85
2034	9.71	11.99	13.10	14.20	17.81	18.85
2035	9.71	11.99	13.10	14.20	17.81	18.85
2036	9.71	11.99	13.10	14.20	17.81	18.85
2037	9.71	11.99	13.10	14.20	17.81	18.85
2038	9.71	11.99	13.10	14.20	17.81	18.85

Source: DECC IAG guidance

http://www.decc.gov.uk/en/content/cms/about/ec_social_res/iag_guidance/iag_guidance.aspx

Marginal electricity emission factors (as per DECC IAG guidance)

Marginal Electricity Emission Factors	kgCO2/kWh
2013	0.3735
2014	0.3735
2015	0.3735
2016	0.3735
2017	0.3735
2018	0.3735
2019	0.3735
2020	0.3735
2021	0.3735
2022	0.3735
2023	0.3735
2024	0.3735
2025	0.3735
2026	0.3510
2027	0.3286
2028	0.3061
2029	0.2836
2030	0.2612
2031	0.2387
2032	0.2162
2033	0.1938
2034	0.1713
2035	0.1488
2036	0.1264
2037	0.1039
2038	0.0814

Source: DECC IAG guidance

http://www.decc.gov.uk/en/content/cms/about/ec_social_res/iag_guidance/iag_guidance.aspx

Forecast carbon prices (as per DECC IAG guidance)

Carbon prices	Low (£/tCO2e)	Central (£/tCO2e)	High (p/kWh)
2013	11.13	13.96	14.56
2014	11.44	14.14	14.70
2015	11.14	14.08	14.44
2016	10.96	14.34	14.64
2017	11.19	14.50	15.24
2018	11.10	14.42	15.44
2019	11.46	14.72	16.11
2020	12.05	15.22	16.56
2021	12.32	15.83	17.06
2022	12.72	16.06	17.27
2023	12.52	16.15	17.44
2024	13.25	16.73	17.99
2025	13.69	17.10	18.33
2026	13.96	17.20	18.37
2027	14.06	17.56	18.64
2028	14.13	17.58	18.63
2029	14.08	17.61	18.67
2030	14.20	17.81	18.85
2031	14.20	17.81	18.85
2032	14.20	17.81	18.85
2033	14.20	17.81	18.85
2034	14.20	17.81	18.85
2035	14.20	17.81	18.85
2036	14.20	17.81	18.85
2037	14.20	17.81	18.85
2038	14.20	17.81	18.85

Source: DECC IAG guidance

http://www.decc.gov.uk/en/content/cms/about/ec_social_res/iag_guidance/iag_guidance.aspx

Annex B: Further tables of Capital, Energy and Carbon Savings

Capital, Energy and Carbon Savings – Refurbishment Projects (central scenario)

Savings for Refurbishment Projects - Central refurbishment rate				
Year	Capital cost saving (£)	Energy Saving (£)	Carbon Saving (£)	Total (£)
2013	17,728,750	£1,043,497	£66,397	£18,838,644
2014	17,728,750	£2,051,769	£142,683	£19,923,202
2015	17,728,750	£3,077,944	£236,592	£21,043,285
2016	17,728,750	£4,131,662	£342,718	£22,203,129
2017	17,728,750	£5,172,864	£457,314	£23,358,928
2018	17,728,750	£5,940,341	£581,417	£24,250,508
2019	17,728,750	£6,828,320	£726,726	£25,283,796
2020	17,728,750	£7,796,651	£898,275	£26,423,676
2021	17,728,750	£8,935,685	£1,137,803	£27,802,238
2022	17,728,750	£9,819,314	£1,391,647	£28,939,711
2023	-	£9,898,921	£1,560,422	£11,459,343
2024	-	£10,475,974	£1,729,197	£12,205,171
2025	-	£10,193,025	£1,790,695	£11,983,720
2026	-	£9,038,365	£1,613,060	£10,651,425
2027	-	£8,071,702	£1,410,808	£9,482,509
2028	-	£6,898,434	£1,190,824	£8,089,258
2029	-	£5,670,653	£959,995	£6,630,648
2030	-	£4,536,816	£733,542	£5,270,358
2031	-	£3,351,058	£541,195	£3,892,252
2032	-	£2,268,408	£360,064	£2,628,472
2033	-	£1,288,868	£197,683	£1,486,551
2034	-	£412,438	£59,985	£472,423
NPV	**152,603,519**	**90,260,847**	**12,463,594**	**255,327,960**

Capital, Energy and Carbon Savings – New buildings (low scenario)

Savings for Refurbishment Projects - low build rate				
Year	Capital cost saving (£)	Energy Saving (£)	Carbon Saving (£)	Total (£)
2013	5,839,329	174,068	8,803	6,022,200
2014	5,839,329	357,579	19,976	6,216,885
2015	5,839,329	529,240	34,538	6,403,108
2016	5,839,329	678,041	55,232	6,572,602
2017	5,839,329	869,755	75,466	6,784,550
2018	5,839,329	988,290	92,026	6,919,646
2019	5,839,329	1,144,651	110,178	7,094,159
2020	5,839,329	1,317,738	130,319	7,287,386
2021	5,839,329	1,418,937	146,736	7,405,003
2022	5,839,329	1,509,020	161,597	7,509,947
2023	-	1,258,006	149,804	1,407,809
2024	-	1,150,525	134,414	1,284,939
2025	-	970,619	115,430	1,086,049
2026	-	755,288	87,264	842,552
2027	-	516,863	58,652	575,515
2028	-	326,911	35,741	362,652
2029	-	176,988	18,788	195,777
2030	-	78,062	7,792	85,854
2031	-	26,021	2,594	28,615
NPV	**50,263,116**	**10,846,050**	**1,080,063**	**62,189,230**

Capital, Energy and Carbon Savings – Refurbishment Projects (low scenario)

Savings for Refurbishment Projects - low refurbishment rate				
Year	Capital cost saving (£)	Energy Saving (£)	Carbon Saving (£)	Total (£)
2013	9,091,667	372,451	18,836	9,482,954
2014	9,091,667	765,108	42,743	9,899,518
2015	9,091,667	1,132,410	73,901	10,297,977
2016	9,091,667	1,450,797	118,179	10,660,642
2017	9,091,667	1,861,005	161,473	11,114,144
2018	9,091,667	2,114,634	196,908	11,403,208
2019	9,091,667	2,449,198	235,746	11,776,611
2020	9,091,667	2,819,550	278,841	12,190,058
2021	9,091,667	3,036,085	313,970	12,441,722
2022	9,091,667	3,228,835	345,767	12,666,268
2023	-	2,691,741	320,533	3,012,274
2024	-	2,461,765	287,605	2,749,370
2025	-	2,076,823	246,984	2,323,807
2026	-	1,616,081	186,719	1,802,800
2027	-	1,105,926	125,498	1,231,424
2028	-	699,488	76,475	775,963
2029	-	378,700	40,201	418,901
2030	-	167,028	16,671	183,700
2031	-	55,676	5,551	61,227
NPV	**78,258,215**	**23,207,179**	**2,311,000**	**103,776,394**

Capital, Energy and Carbon Savings – New buildings (high scenario)

Savings for New buildings - high build rate				
Year	Capital cost saving (£)	Energy Saving (£)	Carbon Saving (£)	Total (£)
2013	14,629,878	686,258	51,323	15,367,459
2014	14,629,878	1,345,137	109,604	16,084,619
2015	14,629,878	1,973,594	181,440	16,784,913
2016	14,629,878	2,631,554	272,882	17,534,314
2017	14,629,878	3,454,462	357,760	18,442,100
2018	14,629,878	4,156,103	475,110	19,261,091
2019	14,629,878	5,062,883	589,242	20,282,003
2020	14,629,878	5,882,383	729,861	21,242,122
2021	14,629,878	6,827,431	996,632	22,453,942
2022	14,629,878	7,719,894	1,302,413	23,652,185
2023	-	7,831,565	1,497,456	9,329,021
2024	-	8,217,805	1,692,500	9,910,305
2025	-	8,421,547	1,887,543	10,309,090
2026	-	8,429,114	1,957,315	10,386,429
2027	-	8,620,958	2,003,623	10,624,581
2028	-	7,844,034	1,823,820	9,667,854
2029	-	7,050,987	1,620,677	8,671,664
2030	-	6,313,856	1,401,232	7,715,089
2031	-	5,411,877	1,199,669	6,611,546
2032	-	4,509,897	982,578	5,492,476
2033	-	3,607,918	759,554	4,367,472
2034	-	2,705,938	540,190	3,246,128
2035	-	1,803,959	384,510	2,188,469
2036	-	901,979	204,447	1,106,426
NPV	**125,929,407**	**80,425,223**	**14,614,335**	**220,968,965**

Capital, Energy and Carbon Savings – Refurbishment Projects (high scenario)

Savings for Refurbishment Projects – high refurbishment rate				
Year	Capital cost saving (£)	Energy Saving (£)	Carbon Saving (£)	Total (£)
2013	23,638,333	1,486,008	111,133	£25,235,473
2014	23,638,333	2,912,727	237,334	£26,788,394
2015	23,638,333	4,273,575	392,887	£28,304,794
2016	23,638,333	5,698,305	590,893	£29,927,531
2017	23,638,333	7,480,211	774,685	£31,893,229
2018	23,638,333	8,999,527	1,028,792	£33,666,652
2019	23,638,333	10,963,048	1,275,930	£35,877,311
2020	23,638,333	12,737,574	1,580,423	£37,956,331
2021	23,638,333	14,783,961	2,158,085	£40,580,378
2022	23,638,333	16,716,478	2,820,214	£43,175,025
2023	-	16,958,288	3,242,557	£20,200,845
2024	-	17,794,642	3,664,899	£21,459,542
2025	-	18,235,820	4,087,242	£22,323,062
2026	-	18,252,206	4,238,325	£22,490,531
2027	-	18,667,620	4,338,599	£23,006,220
2028	-	16,985,288	3,949,258	£20,934,545
2029	-	15,268,042	3,509,376	£18,777,418
2030	-	13,671,877	3,034,196	£16,706,073
2031	-	11,718,752	2,597,735	£14,316,487
2032	-	9,765,626	2,127,652	£11,893,278
2033	-	7,812,501	1,644,720	£9,457,221
2034	-	5,859,376	1,169,714	£7,029,090
2035	-	3,906,251	832,609	£4,738,859
2036	-	1,953,125	442,704	£2,395,830
NPV	**203,471,359**	**174,150,898**	**31,645,539**	**409,267,796**

Annex C: Savings to Business

Capital and Energy Savings – New Build Projects

Central rate			
Year	Capital cost saving (£)	Energy Saving (£)	Total (£)
2013	9,950,061	608,466	10,558,527
2014	9,950,061	1,232,094	11,182,154
2015	9,950,061	1,841,007	11,791,067
2016	9,950,061	2,499,854	12,449,914
2017	9,950,061	3,159,769	13,109,830
2018	9,950,061	3,721,072	13,671,133
2019	9,950,061	4,340,621	14,290,682
2020	9,950,061	4,999,763	14,949,823
2021	9,950,061	5,677,885	15,627,946
2022	9,950,061	6,189,641	16,139,701
2023	-	6,225,581	6,225,581
2024	-	6,448,991	6,448,991
2025	-	6,220,622	6,220,622
2026	-	5,506,404	5,506,404
2027	-	4,857,067	4,857,067
2028	-	4,094,447	4,094,447
2029	-	3,334,581	3,334,581
2030	-	2,626,243	2,626,243
2031	-	1,939,838	1,939,838
2032	-	1,313,121	1,313,121
2033	-	746,092	746,092
2034	-	238,749	238,749
NPV	**85,647,002**	**£55,490,449**	**£141,137,451**

Capital and Energy Savings – Refurbishment Projects

Central Rate			
Year	Capital cost saving (£)	Energy Saving (£)	Total (£)
2013	17,728,750	1,561,278	-£17,197,966
2014	17,728,750	3,161,458	-£19,046,374
2015	17,728,750	4,723,883	-£20,872,586
2016	17,728,750	6,414,435	-£22,853,534
2017	17,728,750	8,107,727	-£24,846,844
2018	17,728,750	9,547,987	-£26,571,652
2019	17,728,750	11,137,703	-£28,484,625
2020	17,728,750	12,829,010	-£30,538,540
2021	17,728,750	14,569,020	-£32,721,105
2022	17,728,750	15,882,146	-£34,448,788
2023	-	15,974,366	-£19,333,198
2024	-	16,547,620	-£20,151,331
2025	-	15,961,642	-£19,573,059
2026	-	14,129,013	-£17,356,618
2027	-	12,462,863	-£15,296,587
2028	-	10,506,038	-£12,896,520
2029	-	8,556,281	-£10,492,289
2030	-	6,738,738	-£8,238,655
2031	-	4,977,477	-£6,084,680
2032	-	3,369,369	-£4,111,933
2033	-	1,914,414	-£2,328,719
2034	-	612,613	-£741,581
NPV	**152,603,519**	**£142,384,263**	**£294,987,828**

Title: Consolidation and simplification of parts M, K and N of the Building Regulations **IA No:** DCLG 0078 **Lead department or agency:** Department for Communities and Local Government **Other departments or agencies:**	Impact Assessment (IA) **Date:** 17/12/2012 **Stage:** Final **Source of intervention:** Domestic **Type of measure:** Secondary legislation **Contact for enquiries:** Brian Martin

Summary: Intervention and Options

RPC Opinion: Validated by RPC

Cost of Preferred (or more likely) Option				
Total Net Present Value	**Business Net Present Value**	**Net cost to business per year** (EANCB on 2009 prices)	**In scope of One-In, One-Out?**	**Measure qualifies as**
£38.2m	£38.3m	-£4.1m	Yes	OUT

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

The Building Regulations set out baseline guidance in order to ensure health, safety, welfare, access and conservation of fuel and power where building work takes place. In the case of Part K (Protection from falling, collision and impact 1998), Part M (Access to and use of buildings 2004) and Part N (Glazing safety 1998) the staggered nature of previous updates to technical guidance this has created duplication and overlap which generate unnecessary cost to industry.

As Approved Documents are considered Statutory Guidance, only Government can take the necessary steps to resolve these issues through their amendment.

What are the policy objectives and the intended effects?

The overall aim of this project is to reduce cost and complexity for industry and make it easier to comply with Part K (Protection from falling collision and impact), Part M (Access to and use of buildings) and Part N (Glazing) of the Building Regulations by the consolidation of overlapping and duplicated guidance into one Approved Document. The guidance in the current Approved Documents N and K along with some overlapping guidance that currently resides in Approved Document M, will be incorporated into a consolidated version of Part K. Technical changes will be kept to the minimum and be limited to those necessary to resolve conflicts within the existing guidance and will not increase cost to industry.

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

Option 0 – Do Nothing

Do nothing would continue to leave in place guidance that contains overlap and duplication.

Option 1 – Consolidate and Simplify Guidance (Chosen Policy Option)

The chosen policy option is a consolidation exercise which will significantly reduce the amount of cross referencing of guidance needed to achieve the desired standards where building work takes place. The policy will simplify compliance, deliver administrative savings by reducing confusion, negotiation and dispute within the building control application process, and will deliver easier and more appropriate compliance by removing conflicting and overlapping guidance.

Will the policy be reviewed? It will be reviewed. **If applicable, set review date:** 11/2016

Does implementation go beyond minimum EU requirements?			N/A		
Are any of these organisations in scope? If Micros not exempted set out reason in Evidence Base.	**Micro** Yes	**< 20** Yes	**Small** Yes	**Medium** Yes	**Large** Yes
What is the CO_2 equivalent change in greenhouse gas emissions? (Million tonnes CO_2 equivalent)			**Traded:** Nil	**Non-traded:** Nil	

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 the responsible Minister:  Date: 17 Dec. 12

Summary: Analysis & Evidence

Policy Option 1

Description: Consolidate and simplify guidance

FULL ECONOMIC ASSESSMENT

Price Base Year 2012	PV Base Year 2013	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: 11.5	High: 86.8	Best Estimate: 38.2

COSTS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	1.7	1	Optional	**1.7**
High	7.3		Optional	**7.3**
Best Estimate	3.3		0	**3.3**

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

Building control officers, architects, designers and surveyors will incur costs in becoming familiar with revised guidance and accessing suitable documentation (£2.3m). Glazing firms could be required to print new leaflets and other documentation to remove references to Approved Document N (£1m).

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

None

BENEFITS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	Optional		1.5	**13.2**
High	Optional		10.9	**94.1**
Best Estimate	0		4.8	**41.4**

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

Consolidation and simplification of guidance delivers is estimated to save £4.8m per annum across 350,000 building projects by reducing the time spent resolving queries and determining which element of guidance applies in a particular circumstance.

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

The monetised savings covers the time-saving from the simplified guidance; the policy will also help to avoid instances of non-compliance which can involve much greater involvement of building control and be costly to rectify during or post completion of building works.

Key assumptions/sensitivities/risks **Discount rate (%)** 3.5%

The new Approved Documents (ADs) supporting Part K and Part M will not introduce any new technical requirements and the process of updating references and removing duplication should ensure the same level of provision. Revisions to guidance should safeguard against any undesirable or negative outcomes particularly in terms of access and use of buildings for older and disabled people. The administrative savings are subject to uncertainty but consultation has supported the estimates presented.

BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:			In scope of OIOO?	Measure qualifies as
Costs: -0.37	**Benefits: +4.81**	**Net: +4.44**	Yes	OUT

Evidence Base (for summary sheets)

Problem under Consideration

Background on the Building Regulations

The Building Regulations control certain building work - principally to protect the health, safety and welfare of people in or around buildings.

Part K (Protection from falling, collision and impact) primarily deals with the design of staircases, handrails, guarding to areas where falls are possible, projecting surfaces such as windows and collision risks from doors. HSE estimates that slips, trips and falls in the workplace cost society £800m per year and result in 40 fatalities, whilst in the home there are in excess of 600 fatalities per year at an estimated cost of £1.2bn. Part K sets out reasonable and cost effective measures to limit the likelihood of these types of injuries where building work is undertaken. Approved Document K (ADK), which provides guidance supporting Part K of the Regulations was last updated in 1998.

Part M (Access to and use of buildings) primarily deals with ensuring that the built environment is accessible to a broad range of users including disabled people into homes, places of work and accessing services. Approved Document M (ADM) sets out reasonable provision for access in most common circumstances and establishes a baseline of cost effective measures. The Approved Document includes guidance on the design of staircases, ramps, handrails, guarding, manifestation of glazing (markings to prevent people walking into glass panels) and collision risks from doors which overlap with guidance in Part K and Part N.

Part N (Glazing – safety in relation to impact, opening and cleaning) deals primarily with safe brakeage of glazing in critical locations, manifestation of glazing to prevent collision, safe cleaning of windows in commercial buildings, prevention of falling from windows and glazed openings. Much of Part N guidance (Approved Document N - ADN) is duplicated within ADK or ADM, though with different limits in terms of its application and slightly different guidance. Guidance in ADM is given precedence over ADN where duplication occurs and as a result much of the guidance in ADN has become redundant.

The regulations themselves are expressed in “functional” terms and do not dictate how the desired level of structural safety *must* be achieved. However, for the benefit of both industry and building control bodies, advice on how the requirements of the Building Regulations *may* be met are contained in guidance approved by the Secretary of State (Approved Documents). This covers some of the more common building situations, but there may well be alternative ways of achieving compliance with the provisions. However, if followed, the guidance may be relied upon in any proceedings as tending to indicate compliance with the Building Regulations.

The Problem

Measures introduced into ADM in 2004 created a degree of duplication with certain provisions in ADK and ADN on the basis that both documents would be updated within a short timeframe to resolve overlap (provisionally in 2006). This has not occurred. Whilst it might be expected that industry would have adapted to the contradictions between the various different parts of guidance, discussions with designers, building control bodies and contractors support the view that problems persist and that Industry continues to incur unnecessary cost as a result of the overlap and duplication that is contained in the existing guidance.

The time elapsed since the last revision of ADK and N also means that due to the introduction of a harmonised standard covering thermally toughened soda lime silicate safety glass (EN 12150-2) the impact classification is now cited in BS EN 12600. It is therefore necessary to reference BS EN 12600 inline with BS 6206 to ensure the guidance is in conformity with the European standard and classifications. In this particular situation, continued reference to an outdated standard creates wasteful confusion and dispute within industry.

These costs arise for a number of reasons;

- Designers and specifiers spend unnecessary time deciding on which part of the regulations should apply in each specific circumstance.

- Designers and specifiers spend unnecessary time negotiating with building control bodies as to which standards should be adopted.
- Disputes arise in a small number of cases where building control bodies disagree with applicant's interpretation of which guidance should be followed.
- The lack of reference to the harmonised testing standards (e.g. for impact resistance of glass) creates unnecessary uncertainty.
- The need to cross reference between different guidance documents dealing with the same aspects of building work.

In the worst case scenario dispute may arise as to the necessary level of provisions in building work which may already have been partially or fully completed. In such cases the cost of retro-fit or replacement can be significant, and additional costs arising from informal and formal enforcement action also need to be considered.

Given that the three parts of guidance under consideration relate to common if not prevalent features of building work at all scales of development – from provisions for safety glazing in windows to accessible door widths and minimum staircase dimensions to ensure their safe and accessible use – we have accepted the initial findings of research undertaken by EC Harris and PRP Architects that duplication between creates cost for in relation to a large proportion of building control applications.

Rationale for Intervention

Building Regulations deal with a number of market failures. There are agency issues in that the designer, builder or even the owner of a building is unlikely to be the occupant and might therefore not take into account health and safety risks faced by occupants in the future to the socially desirable extent. This is particularly true as there are information asymmetries and the long term performance of the building may be either complex to assess or not observable. Furthermore since the effects are long lasting, Building Regulations help to ensure that health and safety considerations are thought about at the point of build, rather than costly solutions being required in the future. Guidance in APK, ADM and ADN is in place to safeguard the health and safety of people in and around buildings by specifying minimum requirements at the point of build.

The Hampton Review principles set out key characteristics of good regulation including the need to ensure that all regulations should be so written that they are easily understood, easily implemented, and easily enforced and all interested parties should be consulted when they are being drafted. The existing overlap and duplication between AD K, M and N of the Building Regulations means that specific aspects of existing regulation are demonstrably poorly aligned with this principle. We therefore propose to revise existing guidance in order to minimise cost to Industry whilst maintaining critical aspects of supporting guidance which deliver a safe and accessible built environment. As Approved Documents are Statutory Guidance, only government can take the necessary steps to resolve these issues through their amendment.

Policy objective

The overall aim of this project is to reduce cost and complexity for industry and promote easier compliance for Part K (Protection from falling, collision and impact), Part M (Access to and use of buildings) and Part N (Glazing) of the Building Regulations by the consolidation of overlapping and duplicate guidance into one Approved Document.

The guidance in the current ADN and K along with some overlapping guidance that currently resides in ADM, will be incorporated into one new consolidated ADK. Technical changes will be kept to the minimum and be limited to those necessary to resolve conflicts with the existing guidance or with current construction practice. These changes will be made in October 2012 coming into force in April 2013.

Description of options considered (including do nothing)

Policy Option 0 – Do Nothing

A do nothing option would see current guidance, which is known to contain confusing overlap and duplication, left as it is. Industry would continue to incur cost in determining how best to apply the guidance to individual projects.

Policy Option 1 - Consolidate and simplify guidance (this is the chosen policy option)

This option will consolidate and simplify the guidance contained in Approved Documents K, M and N. This will reduce compliance costs by removing areas where the guidance is liable to create confusion and lead to delays.

Response to the Public Consultation

The proposals were supported in the public consultation.

- 47% of respondents agreed that the technical changes would not have an impact on the way industry applies existing guidance, a large proportion of which were building control professionals, and a further 30% of respondents had no opinion.
- This was echoed in only 26% of respondents believing that the changes to the wording of the draft ADK wll impact on the way industry apply the guidance.
- Overall 92% of those with an opinion on the new style and layout of the draft Approved Document agreed that it was easier to read and use.
- A number of suggestions were made regarding the technical drafting of the Approved Document, many of which are to be reflected in the final text.
- The majority of respondents with an opinion agreed with the estimated costs and benefits in the consultation stage impact assessment. Some minor additional transition costs were identified which have been reflected in the impact assessment.

In relation to the technical elements of the guidance we have, for example, taken on board comments about the possible confusion caused in respect of the introduction of ‘easy access’ and ‘utility’ stairs. In order to provide clarity we have removed the reference of ‘easy access’ and replaced it with ‘general access’ which is defined as a stair intended for all users of a building on a day-to-day basis as the normal route between levels. The definition of ‘general access’ is now inline with guidance provided in relevant British Standards. In this respect we have also indicated throughout the document within the relevant provisions, which type of stair should be required for particular situations/circumstances.

A number of respondents also raised the issue that external ramps and stairs (including within the curtilage of the site) were still covered in ADM, whilst this is the case, this is due to the limits of application within Part K, in that external steps and ramps are only covered by Part K if they form part of the building. In order to resolve the confusion the guidance provided in the new draft ADK has been amended to clearly state what the user is required to do in order to satisfy the functional requirements of Part K for external ramps, steps and stairs.

In addition there were some comments made relating to the estimated costs and benefits in the consultation stage impact assessment. These have now been reflected in the revised estimates and these are discussed within the costs and benefits section.

Costs and benefits of the preferred option

Costs

ADM, K and N have wide relevance to architects, designers, surveyors and Building Control Officers, as well as some Industry operatives and manufacturers (particularly manufacturers of staircases, guarding, balustrades, doors windows and glazing products). Because the technical content of the guidance is not changing, we do not foresee any significant changes to existing practice within industry. Only 21 respondents to the consultation disagreed that this was the case. A number of minor amendments and

clarifications have also been taken on board as a result of the consultation to ensure that the revisions maintain the current levels of provision. The only costs are therefore the transition costs, primarily those associated with familiarisation with the new guidance.

Industry will incur these transitional costs because of the need to update documentation, become familiar with the revised guidance. Approved Documents are freely available to download from the internet; given that we do not anticipate making changes to technical requirements which would result in changes to industry practice we believe these costs will be minimal and quickly outweighed by the benefits.

The key transition costs that we have identified are:

- purchasing new documents (estimated as £1 per professional (excluding building control) as documentation is available free to view and download and one hard copy could be shared among professionals within a business). It was suggested by consultation respondents that the costs for replacing documents for building control professionals would be higher than identified, as it is likely that more building control professionals would require there own hard copy of the document. On this basis we have assumed that 50% of building control professionals will purchase a new document at a cost of £12.50, with the remaining 50% estimated at £1 per professional as previously assumed. We have therefore increased purchasing new document costs for building control professionals to £6.75 per person.
- familiarisation time to become acquainted with the new documents (estimated 30 minutes per professional in the central case; to reflect uncertainty around this estimate 15minutes is assumed in the low cost scenario and 1 hour in the high cost scenario)
- the cost of updating and printing trade documentation and trade leaflets to refer to the revised ADK and amendments to ADM and remove reference to ADN. This additional cost was identified by a number of glazing firms that responded to the consultation. We have estimated £200 per firm[1].

The transitional costs are set out in table 1. The total transitional cost is estimated to be £3.3m. This is a one-off cost incurred in the first year following implementation of the revised guidance.

62% of respondents with a view on the estimated transitional costs agreed with the figures presented in the consultation stage impact assessment. Cost estimates have been revised in the light of consultation comments to take into account costs to glazing firms of reprinting leaflets and other documentation.

The estimated number of building control officers, covering both local authority building control and private sector approved inspectors has been increased from 4,000 to 4,500 on the basis of full membership information provided by LABC[2].

Table 1 – transitional costs (Central case)

Affected party	Number persons	Familiarisation time (hrs)	Hourly rate	Document cost	Total cost
Building Control	4,500	0.5	£43	£7	£126,000
Architects / Designers	32,000	0.5	£51	£1	£848,000
Surveyors	25,000	0.5	£43	£1	£556,250
Others	40,000	0.5	£35	£1	£740,000
Glazing firms	5,000	-	-	£200	£1,000,000
Total	105,000				**£3,270,250**

Hourly rates have been calculated for the central case by attaching a 50% weighting to wage rates from the EC Harris professional fees database and a 50% weight to wage rates derived from the Annual Survey of Hours and Earnings[3].

[1] This assumes 5000 leaflets @ £100 and 500 brochures @ £100

[2] Information provided by LABC indicates that there are 3,500 local authority building control officers in England and Wales. Assuming that around 5% are part of Welsh building control bodies would give an estimate of approximately 3,300 for England. The number of approved inspectors is subject to more uncertainty. The survey of building control estimated 1,200 technical staff across only those responding to the survey, although estimates of the number of qualified professionals made by the CIC suggest around 700 qualified professional surveyors.

The EC Harris database has been used as a source of evidence on the cost for workers in the construction industry. This reflects the value by the market of a professional including wage, on costs and other business costs to the organisation. This approach is widely used in the construction industry. However, there is a risk that this may overstate the cost savings. For instance in some situations, the saving may result in the professional being employed for fewer hours and delivering less than the full business cost savings assumed in the charge out rates. We have therefore also used the Standard Cost Model to estimate costs based upon the Annual Survey of Hours and Earnings (ASHE) plus an additional estimate of 30% for additional overheads such as pension contributions and national insurance contributions[4]. It is our assessment that this approach underestimates typical benefits of time for professionals in the construction industry.

So for our central estimate we have assumed an hourly rate half way between the EC Harris industry estimate and the ASHE plus 30% approach. We feel this estimate reasonably reflects that some time savings of key professionals have a high value reflected in the charge out rate for carrying out other priorities while in other situations the business cost saving might be more constrained.

In the low scenario hourly rates are based on the Annual Survey of Hours and Earnings and the familiarisation time is assumed to be only 20 minutes leading to an estimated transition cost of £1.7m. For the high scenario hourly wage rates have been based on the EC Harris database and familiarisation time is assumed to be one hour, giving a transition cost of £7.3m.

Benefits

The benefits of consolidating and simplifying guidance are the time savings to all those involved in taking projects through the building control process. Benefits have been based on research commissioned by DCLG and undertaken by construction cost consultants EC Harris in conjunction with PRP architects. This research established the number of projects in England where a building regulations application is required, stratified by the cost of the building work (based on data from the Office of National Statistics) and indicating the number of projects fitting into each value-band (Table 2)[5].

The majority of building projects have a value of less than £25k and because these represent smaller scale and simpler types of construction, it was estimated at consultation stage that only 20% of such projects would incur cost resulting from the complexity of existing guidance, with this increasing as projects become larger and more complex to 100% for all projects of £2m or above. There remains a margin of uncertainty over the proportion of construction projects to which the guidance of ADK, M and N would apply, particularly for small scale works which are unlikely to be newbuild projects and might be of a nature where the guidance is not directly relevant. To illustrate this uncertainty a low and a high scenario are also considered. In the summary tables of benefits all net present values have been discounted at 3.5% to the year of implementation (2013.).

As part of the research that accompanied the consultation stage impact assessment PRP Architects reviewed completed projects across a variety of scales and interviewed a range of designers to capture their experience of using relevant aspects of guidance in ADK, N and M to the Building Regulations[6]. They estimated that the typical cost of resolving these difficulties was 1 hour expended on works below £25,000 where Parts M, K and N applied, and 3 hours expended on works above that value. These costs arise primarily in resolving conflict, duplication and in confirming which particular standards need to be applied. These are purely additional costs arising as a result of the overly complex nature of existing guidance or confusion between different parts of the existing cadre of guidance.

For this final stage impact assessment we have reduced the time input for projects in the £25,000 to £500,000 value band to two hours to reflect the mix of work in this category. We have also attempted to better reflect the nature of the overlap in guidance by assuming that for residential dwellings in the <£25,000 value band works are unlikely to incur delay due to overlap of guidance on Part M and Part K. This is because a modification to an existing dwelling that does not comply with Part M must only make the dwelling as a whole no less compliant with the provisions of Part M. Of the overlapping material approximately 70% is related to the overlap of Part K and Part M and 30% to Part K and Part N. We

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[3] ASHE, ONS, 2012, http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-235202. Estimates from the ASHE have been up-rated by 30% to allow for pensions, national insurance contributions and other variable costs of labour employment (see Standard Cost Model, BERR, 2005, http://www.berr.gov.uk/files/file44503.pdf)

[4]

[5] http://www.ons.gov.uk/ons/rel/construction/construction-statistics/no--12--2011-edition/index.html

[6] http://www.communities.gov.uk/publications/planningandbuilding/rationalisationpartkmnia78

have therefore adjusted the estimate of one hour for minor works to 20 minutes to reflect that only the overlap on glazing is very likely to deliver a saving for these works. We continue to assume that delay would occur for 20% of projects in the category related to glazing, which is consistent with the limited information we do have on the different types of minor building work carried out each year[7].

Simplifying the guidance should reduce the need for the related 'informal enforcement' which takes place between a building control body and an applicant. This can occur at the stage when a full plans application is commented on by the building control body, where non-compliance is identified in respect of one or more elements of the proposed design; this is thought to occur in about 33% of applications. Where issues are identified prior to work commencing a building control body will write informing the applicant of their concerns and in the majority of cases this will be resolved prior to commencement of work on site by amending the design or providing further information by correspondence. The majority of the benefits of informal enforcement are captured in the estimated three hour time saving per project since one approach to clarifying the guidance would be to seek the advice of a building control officer.

For the transition costs the hourly wage rates are based on the Annual Survey of Hours and Earnings in the low scenario and the EC Harris fees database in the high scenario, with a 50% weight attached to each estimate in the central case. The estimated benefits of consolidating and simplifying the guidance are shown in tables 2-4. The total number of applications to building control bodies in a given year is uncertain. Based on a conservative extrapolation of the results of the 2008 Survey of Building Control[8], the consultation stage IA assumed 300,000 applications to building control per year. Since the consultation, further research from the Building Control Alliance[9] on compliance actions has strengthened the belief that this estimate could be too low, having identified work on almost 200,000 projects in the space of one working month[10]. To capture this for final stage IA we have adopted a range of 300,000 to 400,000 building control applications per year, with an estimate in the central case scenario of 350,000 per annum.

Excluding those who felt unable to comment on the estimated administrative savings in the public consultation, **88%** agreed with the estimates presented, including **94%** of respondents from either public or private building control bodies who are well placed to comment on the issues in question. None of the respondents were able to offer additional evidence on the potential administrative savings. The National Housing Federation said the rationalization should be 'welcomed', whilst the Association of Plumbing and Heating Contractors suggested the consolidation 'would help micro and small businesses to comply with the regulations as there would be less documentation to obtain and hold within the business'.

Table 2 – Savings due to reduction in administrative cost of duplication and overlap, LOW VALUE

Construction project value	Residential	Mixed	Total	% applicable	Time input (hrs)	Hourly rate	Total annual benefit
Less than £25,000	201,018	50,255	251,273	10%	1	£27	£497,521
25,000-500,000	5,834	32,929	38,763	30%	2	£27	£627,961
500,000-2m	3,332	4,125	7,457	40%	3	£27	£241,607
2-10m	452	1,594	2,046	80%	3	£27	£132,581
10m-20m	45	215	260	100%	3	£27	£21,060
20m+	20	181	201	100%	3	£27	£16,281
Total	210,701	89,299	300,000				**£1,537,010**
						NPV	**£13,230,101**

Table 3 – Savings due to reduction in administrative cost of duplication and overlap, CENTRAL VALUE

Construction project value	Residential	Mixed	Total	% applicable	Time input (hrs)	Hourly rate	Total annual benefit
Less than £25,000	234,521	58,631	293,152	20%	1	£51	£1,395,406

[7] http://www.communities.gov.uk/documents/planningandbuilding/pdf/surveybuildcontrol1.pdf

[8] http://www.communities.gov.uk/documents/planningandbuilding/pdf/surveybuildcontrol1.pdf

[9] http://www.buildingcontrolalliance.org/wp-content/uploads/2012/03/BCA-Compliance-Actions-Research-from-LABC-ACAI-14-March-2012.pdf

[10] If the average project duration was 6 months this would imply 400,000 projects per year. The building control alliance have indicated an average duration of 4 months is possible in the report although other sources have suggested 7 months.

25,000-500,000	6,806	38,417	45,224	50%	2	£51	£2,306,399
500,000-2m	3,887	4,813	8,700	50%	3	£51	£665,537
2-10m	527	1,860	2,387	100%	3	£51	£365,211
10m-20m	53	251	303	100%	3	£51	£46,410
20m+	23	211	235	100%	3	£51	£35,879
Total	245,818	104,182	350,000				**£4,814,841**
						NPV	**£41,444,643**

Table 4 – Savings due to reduction in administrative cost of duplication and overlap, HIGH VALUE

Construction project value	Residential	Mixed	Total	% applicable	Time input (hrs)	Hourly rate	Total annual benefit
Less than £25,000	268,024	67,007	335,031	50%	1	£75	£3,852,870
25,000-500,000	7,779	43,905	51,684	60%	2	£75	£4,651,560
500,000-2m	4,443	5,500	9,943	75%	3	£75	£1,677,825
2-10m	603	2,125	2,728	100%	3	£75	£613,800
10m-20m	60	287	347	100%	3	£75	£78,000
20m+	27	241	268	100%	3	£75	£60,300
Total	280,935	119,065	400,000				**£10,934,355**
						NPV	**£94,119,50**

Table 5 - Summary table of costs and benefits (central case)

Cost/benefit	Transition Costs	Annual Benefit	PV (10 years)
Transition costs	£3,270,250	0	£3,270,250
Time savings	0	£4,814,841	£41,444,643
Net Present Value			**£38,174,393**

The low scenario therefore delivers an estimated NPV of £11.5m and the high scenario delivers an estimated NPV of £86.8m.

Non-Monetised Benefits

In some instances applicants may fail to resolve issues with a building control body who will then enter into further correspondence setting out their intention to enforce. This creates additional cost in approximately 15% of cases which could be reduced by improved clarity of guidance. We believe that reducing the number of instances of formal enforcement has the potential to deliver further benefits on top of those monetised above. Where issues are not resolved at the design stage, industry incurs costs from the need to rectify partially or fully completed building work (because either the building work is constructed in a non-compliant manner, or because it has been designed in a non-compliant manner). We estimate that 3% of building projects incur on-site or post-completion cost in relation to guidance covered by ADM, K and N of the Building Regulations. This covers a broad range from simple matters (adding markings to make a glass screen more visible) to the very significant (e.g. replacing a staircase which does not comply) and no evidence has been forthcoming in the consultation that would allow us to monetise this impact.

Risks and assumptions

The assumptions underpinning the benefits delivered by this policy are set out in the preceding parpagraphs. Given that these proposals are specific in scope and limited in terms of the extent of change they will deliver, we initially undertook limited but robust evidence gathering through informal

consultation with industry and by commissioning a small and specific piece of research by independent constractors. This was followed by the full consultation as part of the overarching 2012 Building Regulations consultation. The majority of respondents agreed with the estimated benefits of the policy and no further evidence was presented in the consultation that could be used in refining the estimates.

The proposals have been presented to the Building Regulations Approved Committee (BRAC). BRAC is a statutory body advising the Secretary of State on Building Regulations and consists of a panel representing a broad range of construction industry expertise. Feedback from this and other informal sources suggests that the changes will be well received and will deliver material benefits to Industry.

Direct costs and benefits to industry (following OIOO methodology)

'One In One Out' is the Government's commitment[11] that any new regulatory cost introduced by a Department (an 'In') will at least be matched by cuts to the cost of existing regulations ('Outs'). Only costs and benefits to businesses and civil society organisations are included in OIOO calculations.

The calculations are done at the level of overall impacts on the economy, so:

a) Costs to business (for example developers) can be offset against benefits to other businesses (for example fuel bill savings for business building occupiers)
b) Costs to business (for example developers) cannot be offset against benefits to private citizens (for example fuel bill savings for households)
c) Where both the costs and the benefits accrue to private citizens (for example requirements for works on existing homes, where the householder will both pay for the works and enjoy the fuel bill savings) are not counted in the calculations.

The direct benefits to business from the policy are the annual savings reported in table 3. The direct costs to business of the policy are the transitional costs in table 1. Costs falling on public sector building control bodies have been excluded from the calculation[12]. According to OIOO methodology the direct costs and benefits should be reported on an 'annual equivalent' basis in 2009 prices for standardised comparison across policies; the annual equivalent net benefit to business from this policy is estimated to be £4.1 million (in 2009 prices)[13].

Table 6 – Direct costs and benefits to business

Annual equivalent cost (£2012)	£368,944
Annual equivalent benefit (£2012)	£4,814,841
Annual equivalent net benefit to business (£2012)	-£4,445,898
Annual equivalent cost (£2009)	£342,011
Annual equivalent benefit (£2009)	£4,463,358
Annual equivalent net benefit to business (£2009)	£4,121,347

Direct costs and benefits to housebuilders (following OIOO methodology)

In the 2010 Comprehensive Spending Review the Government also committed to reduce the total regulatory burden on the house building industry over the Spending Review period (which runs to March 2015). Like the OIOO rule, this means that any new regulation must be at least matched by deregulatory measures of the same value.

We think that these savings fall in the scope of the Comprehensive Spending Review commitment to reduce the regulatory burden on homebuilders over the course of this parliament. These figures can therefore be further broken down to indicate values in relation to residential works. We have assumed that works of value below £25k are not related to home building, and that 30% of works in the range £25-500k are also unlikely to be related to home building. Remaining values are considered to be primarily

[11] www.bis.gov.uk/policies/better-regulation/better-regulation-executive/reducing-regulation-made-simple/one-in-one-out

[12] In line with the assumptions set out in footnote 2 on page 6

[13] Figures have been converted throughout into 2009 prices using a GDP deflator of 0.927, see: http://www.hm-treasury.gov.uk/data_gdp_index.htm

associated with housebuilding. This delivers an annual saving of £0.5m to housebuilders in the central case. Figures in table 7 are presented on the same basis as those in Table 6.

Table 7 – Direct costs and benefits to housebuilders

Annual equivalent cost (£2012)	£25,826
Annual equivalent benefit (£2012)	£493,802
Annual equivalent net cost to business (£2012)	-£467,976
Annual equivalent cost (£2009)	£23,941
Annual equivalent benefit (£2009)	£457,755
Annual equivalent net cost to business (£2009)	-£433,814

Wider Impacts

Guidance in ADM, K and N of the Building Regulations is relevant to general building industry practice in most forms of development, as well as ensuring that completed building work is safe and accessible to a broad range of users. Impacts are primarily economic and social – we have not identified any primary environmental impacts.

Economic / Financial

Only those technical changes necessary to resolve overlap, duplication or contradictory guidance are proposed as part of this work, and it is not intended that changes will materially affect cost to industry, or create advantages or disadvantages for any particular sector. There will be no impact on labour markets or consumers and both competition and innovation should be unaffected. The benefits of this simplification process should be distributed evenly across public and private sector business.

Social Impacts

Simplifying and clarifying guidance in ADM, K and N should deliver benefits in making compliance with baseline requirements to protect health, safety and access to buildings easier and less costly.

Competition Assessment

The proposed policy simplifies the guidance that buildings should generally be constructed to. As such it does not make any significant change to how the UK market will operate. An initial assessment indicates, therefore, that the policy proposal will not directly or indirectly limit the number or range of suppliers, limit the ability of suppliers to compete or reduce suppliers' incentives to compete vigorously. Limiting the number of documents that firms are required to hold copies of and consult in making decisions is a positive step in terms of fostering a competitive market in which small firms are able to compete effectively with larger organisations. Making sense of complex regulations may be a barrier to entry and so this change, whilst small, should have a positive, if marginal, impact on competition in the industry.

Small Firms Impact Test

Generally, there are likely to be costs to most small and medium enterprises resulting from changes to the structure and format of existing guidance. These are likely to be similar in cost to larger firms, and at £26 per employee, one off transitional costs will be quickly outweighed by benefits to small and medium business in easier application of the existing technical standards. Given that a large proportion of building work– particularly those aspects covered by Part K (such as staircase manufacture and installation) and Part N (glazing, window replacement and manufacture) - are undertaken by small and medium sized businesses, simplification is likely to be of proportionately greater benefit to this sector. Limiting the number of documents that firms will be required to hold copies of and consult in making decisions is a positive step in terms of fostering a competitive market in which small firms are able to compete effectively with larger organizations. There was wide support from both small and large businesses in the public consultation on the revised format of the guidance, which appears to have achieved its objective of making the approved document more accessible and an easier place to go for key information, with 73% indicating that the new layout was an improvement that made it easier to find information.

The Association of Heating and Plumbing Contractors commented in response to the consultation that the consolidation 'would help micro and small businesses to comply with the regulations as there would be less documentation to obtain and hold within the business'.

Environmental Impact Tests

It has been determined that this policy will not result in additional greenhouse gasses being emitted and will have no impact on the wider environment.

Geographical Impact

There is unlikely to be any differential impact between rural and urban areas or on a regional basis, and these proposals will not affect skill or education levels.

Equality Impact Assessment

Some aspects of the proposed simplification have direct relevance to particular equality groups identified within the Equalities Act, specifically disability, age and pregnancy / maternity. However, as the existing measures intended to meet the needs of these groups will be retained within simplified guidance our Equality Screening Assessment (Annex A) suggests that there will be no change in outcomes for these groups overall, and that a full equality impact assessment is not required.

Implementation Plan

Revised guidance will be made in October 2012 coming in to force in April 2013. The next technical review of the operation of the building regulations and approved documents should take place in 2016 or 2019, at which point the experience of using the revised guidance can be established.

ANNEX A Equality Impact Test

ANNEX B E C Harris Research, November 2010, 'Building Regulations Review Part N: Glazing Safety'

Title: Building Regulations Part P, Electrical safety in dwellings **IA No:** DCLG 0084 **Lead department or agency:** Department for Communities and Local Government **Other departments or agencies:**	Impact Assessment (Impact Assessment) **Date:** 17/12/2012 **Stage:** Final **Source of intervention:** Domestic **Type of measure:** Secondary legislation **Contact for enquiries:** Ken Bromley

Summary: Intervention and Options

RPC Opinion: IA with RPC awaiting validation

Cost of Preferred (or more likely) Option				
Total Net Present Value	**Business Net Present Value**	**Net cost to business per year** (EANCB on 2009 prices)	**In scope of One-In, One-Out?**	**Measure qualifies as**
£184.3m	£120.6m	-£12.9m	Yes	Out

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

Electric shock accidents and electrical fires in the home present a health and safety risk to people. Since 1 January 2005, all electrical work in dwellings has been required to meet the minimum standards set out in Part P of the Building Regulations. In the light of representations from industry and as part of a wider review of the costs and benefits associated with the Building Regulations, DCLG is amending the regime in order to reduce cost (whilst maintaining an appropriate electrical safety regime). This will be done by introducing the option of third-party certification of work and by reducing the amount of minor work that needs to be notified to, and checked by, a building control body or third party certifier.

What are the policy objectives and the intended effects?

The primary objective is to ensure that electrical work in new and existing homes is carried out so as to minimise the health and safety risks associated with electric shocks and electrical fires in a proportionate and cost-effective way. The intended effect of the policy is that an effective checking regime of higher risk electrical work will continue, but costs will be reduced by moving the focus away from lower-risk types of work, and by introducing the option of third-party inspection, testing and certification of electrical work as an alternative to using a building control body. Greater promotion of the benefits of using a registered electrician will mitigate against the risks arising from reducing the scope of Part P.

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

Three policy options were considered at consultation stage: 'do nothing', 'revoke Part P', and 'amend Part P to reduce costs'. The preferred option following the consultation is to amend Part P to reduce burdens. Revocation of Part P was not supported by respondents nor is it the most cost-beneficial option in this analysis.

Policy Option 0 - 'Do Nothing' has been discounted because there has been criticism that the costs of Part P could be reduced whilst retaining its effectiveness.

Policy Option 1 - 'Amend Part P' is the chosen policy option as it significantly reduces the cost to business of Part P whilst continuing to deliver health and safety benefits.

Will the policy be reviewed? It will be reviewed. **If applicable, set review date:** 10/2016

Does implementation go beyond minimum EU requirements?			No		
Are any of these organisations in scope? If Micros not exempted set out reason in Evidence Base.	**Micro** Yes	**< 20** Yes	**Small** Yes	**Medium** Yes	**Large** Yes
What is the CO_2 equivalent change in greenhouse gas emissions? (Million tonnes CO_2 equivalent)			**Traded:** 0	**Non-traded:** 0	

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 the responsible Minister:  Date: 17 Dec 2012

Summary: Analysis & Evidence

Policy Option 1

Description: Retain Part P with changes

FULL ECONOMIC ASSESSMENT

Price Base Year 2012	PV Base Year 2013	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: 127.5	High: 223.3	Best Estimate: 184.3

COSTS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	2.9	1	0.5	**7.2**
High	3.6		3.7	**35.2**
Best Estimate	3.2		0.5	**7.2**

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

Transition costs fall on electrical firms and building control bodies and have been estimated at £3.2m. Reducing the scope of notifiable work may lead to an impact on benefits delivered by Part P, which we have estimated to be £0.5m per year.

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

Part P is thought to have raised the average competence of domestic electrical installers. Reducing the scope of Part P will, at the margin, reduce the incentive to join a competent person scheme, and might reduce the benefits of training and assessment relative to the counterfactual. Part P delivers significant consumer benefits; we believe incentives to register with a competent person scheme will be maintained and therefore most consumer benefits still delivered but there is some risk attached to this under the policy.

BENEFITS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	Optional		18.9	**162.7**
High	Optional		26.8	**230.5**
Best Estimate	0		22.2	**191.6**

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

The benefits are savings to those undertaking electrical work as a result of reducing the scope of notifiable electrical work (£116.1m) and savings from the introduction of third-party inspection, testing and certification of electrical work (£75.6m).

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

Changes to the Conditions of Authorisation for competent person schemes will replace annual assessments of registered installers with risk-based assessments. These benefits are reflected in the counterfactual; the estimated cost of registering with a scheme is reduced over time to reflect this change. Increased promotion of Competent person schemes will encourage householders to use registered electricians which will ultimately be a more effective way to increase the safety of installations.

Key assumptions/sensitivities/risks **Discount rate (%)** 3.5

The cost, of lost health and safety outcomes, arising from making more minor work non-notifiable is uncertain and therefore the assumptions have been subjected to sensitivity testing in the impact assessment. Estimates attached to the benefits are thought to be robust and have been verified through the public consultation and the additional work undertaken.

BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:			In scope of OIOO?	Measure qualifies as
Costs: -0.3	Benefits: +14.3	Net: +14.0	Yes	OUT

Evidence Base (for summary sheets)

Problem under consideration

Background on the Building Regulations

1. The Building Regulations control certain building work, principally to protect the health, safety and welfare of people in and around buildings. The Regulations set "functional" requirements – for example to make reasonable provision for energy efficiency – but do not dictate how the requirements must be met. For the benefit of both industry and building control bodies, DCLG publishes Approved Documents – containing guidance approved by the Secretary of State – showing ways of meeting the requirements for more common building situations. There may well be other ways, but following the statutory guidance in Approved Documents may be relied upon in any court proceedings as tending to indicate compliance with the Building Regulations.
2. Part P of Schedule 1 to the Building Regulations came into force on 1 January 2005 and covers the safety of electrical installations in dwellings. The Part P requirement is that "reasonable provision shall be made in the design and installation of electrical installations in order to protect persons operating, maintaining or altering the installations from fire or injury". Approved Document P, which was updated in 2006, contains the statutory guidance demonstrating how to comply with the Part P requirement.
3. The guidance calls for all electrical work to follow the technical rules in the UK national standard BS 7671, "Requirements for electrical installations", or an equivalent standard. In addition, it sets out procedures for inspecting and testing electrical installation work, according to the complexity of the work and the competence of the person doing the work.
4. To comply with Part P, all electrical work should follow the technical rules in BS 7671. However, only jobs considered to have the greatest risks for electrical safety are "notifiable". These are jobs that must be either (a) notified in advance to a building control body (the local authority or a private approved inspector) so that the work can be inspected and approved, or alternatively (b) carried out by someone registered with a DCLG-authorised Part P Competent person scheme. These installers are allowed to self-certify compliance with the Building Regulations without involving a building control body (other than to notify the local authority that they have carried out the work), and no building control charges are payable. Competent person schemes monitor their members through regular inspections of their work and also provide processes that allow homeowners to follow-up any deficient work.
5. Part P notifiable jobs currently include major ones such as house rewires, replacing a consumer unit, and fitting a complete new circuit (for example, for an electric shower or cooker); and alterations in what were deemed the more hazardous locations of kitchens, bathrooms and outdoors. However, alterations elsewhere in a dwelling, and repairs and replacements anywhere, are **not** notifiable.
6. A consequence of the introduction of Part P is that firms (including sole trader and small-businesses) that carry out a significant amount of electrical work have been incentivised to register with Competent person schemes. This represents a lower cost alternative to paying building control fees on each notifiable job, the average fee being £246 per job[1], and saves the time of having to complete a building notice and send it to the building control body, which takes approximately 15 minutes[2]. Before Part P came into effect there were 11,000 members of the NICEIC registration scheme and 2,000 members of the Electrical Contractors' Association in England and Wales. Now there are approaching 40,000 registered domestic electrical installers who have been assessed as competent. Membership requires that individuals have their competence to do electrical work assessed, including reviewing qualifications and industry experience, and on occasion their work is tested, for which they pay an annual registration fee to the scheme operator.

[1] Source EC Harris Report, based on a sample review of more than thirty local authority building control charges.

[2] We have costed this on the basis of the central wage rate used elsewhere in this impact assessment for electricians, £19.50/hr. This is based on a 50% weighting attached to estimates derived from the Annual Survey of Hours and Earnings and 50% weighting on the EC Harris fees database. We have amended this from £60/hr assumed in the consultation stage impact assessment.

7. It is expected that the types of electrical work carried out in the home will continue to change. Government policies and consumer practices will continue to drive this – already leading, for example, to the increased use of solar photovoltaic panels and combined heat and power boilers to generate electricity, and into the future seeing a significant increase in high-current charging points for electric vehicles. Part P potentially, therefore, will play an additional role in supporting Government policies on renewables, electric vehicles and smart meters by ensuring that electrical installation work in dwellings is done competently.

The problem

8. There can be significant health and safety risks associated with electrical work that has not been properly undertaken. In addition, there are knock-on costs through property damage and attendance by fire and rescue services as a result of fires originating in electrical installations. However, regulating electrical work to ensure minimum safety standards are achieved does impose a cost on business, particularly where there is a requirement for work to be independently inspected.

Rationale for intervention

9. Part P was introduced in 2005 to try and reduce the number of injuries and fatalities in the home resulting from poor quality electrical work. It required that all electrical work in the home was carried out to the minimum standards developed by the electrical industry, and that higher-risk types of work be checked by a building control body or carried out by a member of a Competent person scheme who was qualified to self-certify compliance with the Building Regulations.
10. Effectively, Part P ensures that consumers can be confident that the work being done in their home by a registered electrician is to acceptable safety standards and, for work by others, that any higher-risk work is subject to scrutiny by the building control body to ensure it is adequate. As such, it extended the regulatory regime governing building work to the highest-risk type of electrical work, that is, work in the home where householders generally lack the necessary knowledge and information to ensure the work they are paying to have carried out is being done competently.
11. DCLG undertook an exercise in the latter half of 2010 to determine what changes were necessary to the Building Regulations to ensure they remained fit-for-purpose, with a particular emphasis on identifying measures to reduce the cost of regulation to business. There were 248 responses from our external partners to this exercise. In addition, DCLG drew upon ideas and suggestions submitted to the Cabinet Office's *Your Freedom* website and DCLG's own website. The report "Future changes to the Building Regulations – next steps" presents a summary and analysis of the responses.
12. The report noted that few respondents questioned the principle of regulations setting national health and safety standards for building construction. Indeed many respondents recognised the positive role Building Regulations play and welcomed the fact that there is a nationally applied set of minimum requirements. There was also support for the general approach to regulating through the Building Regulations – that is, functional requirements supported by guidance in Approved Documents on how to comply.
13. However, with respect to Part P there was some criticism of its cost and bureaucracy. This concern focused on the costs associated with the regime's operation – for example, building control fees and notification – rather than concern about the cost of the work required to comply with the minimum technical standards set out in Approved Document P.
14. In the light of these concerns, Andrew Stunell set out in a Written Ministerial Statement on 16 December that DCLG would be including Part P in its 2013 review of the Building Regulations. This would examine the costs associated with the existing regulatory regime and whether there was a continuing case for regulation and, if there was, whether the regime could be made more cost-effective.

Policy objective

15. The primary policy objective is to deliver adequate standards of electrical installation to ensure safety in the home in a cost-effective way.

16. The reasons for introducing Part P cited in the 2004 Regulatory Impact Assessment went beyond this – looking to improve the competence of domestic installers and the quality of electrical installation work, and to reduce, for example, the cost of damage to property in fires caused by electrical faults. Where possible we have taken these wider benefits into account in this impact assessment.

The options considered

17. Three options were considered in the consultation stage Impact Assessment: 'do nothing', 'revoke Part P' and 'retain Part P with changes'.

18. In this final stage impact assessment we have analysed the chosen policy option, to retain and amend Part P, in detail, against a baseline 'do nothing' option.

Option 0: 'Do Nothing'

19. Option 0, "do nothing", is not preferred because it would miss the opportunity to minimise the costs currently associated with the operation of Part P.

Option 1: 'Amend Part P'

20. Amending Part P is the chosen route forward as it significantly reduces the cost to business of Part P whilst continuing to deliver the safety benefits sought.

21. The two key amendments are:

    - to allow for third-party certification of electrical work; and,
    - to reduce the scope of work that must be notified to building control (or carried out by someone registered with a competent person self-certification scheme – a 'registered competent person').

22. The scope of work that is notifiable under Part P will be reduced to simplify the regime and to focus attention on more major electrical works. All work on control wiring, and all alteration work in kitchens, in bathrooms outside the zones, and outdoors will become non-notifiable.

23. **It is vitally important to note that all electrical installation work in dwellings, even that which is not notifiable, must comply with Part P of the building regulations.** The policy does not change this requirement in any respect, only the monitoring framework that exists to police this requirement for some higher risk electrical work.

24. Third-party certification will reduce costs by allowing an unregistered electrician or a DIYer to employ a qualified, registered electrician (a 'registered third-party certifier') to inspect and test their work and confirm compliance with the building regulations, removing the need for the local authority to become involved.

25. Alternatively unregistered, but suitably qualified, electricians can do the inspection and testing themselves or employ any qualified electrician to do the inspection and testing for them. This will offer cheaper, alternative way of gaining approval by the building control body. This is primarily to address a common complaint from electricians who are not registered with a self-certification scheme (for example, because they work mainly on non-domestic buildings) and who currently can find themselves paying the full building control fee.

26. To support this, the fees regulations will also be amended to make it a requirement for a local authority to consider the qualifications of an unregistered installer in determining the level of inspection required. Although some local authorities already operate according to this principle, we

expect this to increase the number of suitably qualified people who will benefit from lower building control charges.

Response to the consultation

27. We received 158 responses to the consultation. Of these, 25% came from electrical installation firms and, reflecting the make-up of the industry, around three-quarters of these were micro-businesses of fewer than 10 people. A further 9% of respondents were firms classified as building services engineers. Responses from local authority building control accounted for 20% and homeowners were responsible for 11% of the replies. (It should be noted that many of the homeowners responded as DIYers who have undertaken electrical work and/or have some sort of electrical qualification, but who are still required to have their work approved by a building control body.) A further 11% came from national representative or trade bodies, competent person scheme operators or other professional bodies.

28. In relation to the various broad approaches that could be adopted to amend Part P, 11% supported no change, 11% revocation, 62% amendment broadly in the manner proposed, and a further 15% for amending in a significantly different way. Amending Part P broadly in the way proposed by the consultation was favoured more than average by local authority building control, building services engineers and specific interest groups. Electrical installers were slightly less in favour than average of amending the existing regime.

29. The consultation specifically sought the views and input of consultees on the analysis contained in the Impact Assessment that accompanied the consultation. In particular, the consultation asked for views on a number of the key assumptions supporting the analysis (which are drawn upon later in this assessment) as well as more general views about the robustness of the figures and analysis. We have sought to take these on board where appropriate in this Impact Assessment.

Costs and benefits

30. In developing this Impact Assessment, DCLG has drawn upon:

    - the cost/benefit methodology employed in the 2004 Regulatory Impact Assessment
    - initial work undertaken for DCLG by EC Harris in February 2011 that sought to update Part P costs and benefits and a further update to this work including analysis carried out by Adroit Economics in 2012
    - information provided by the Electrical Safety Council and Part P Competent person scheme operators
    - information provided by expert members of the Building Regulations Advisory Committee (BRAC) Part P Technical Working Party.
    - DCLG fire statistics[3]

31. Until 2012 the Building Regulations applied to both England and Wales and the figures in the 2004 Part P Impact Assessment reflect that. However, from 2012 the power to make these regulations in Wales has been devolved to the Welsh Assembly Government. Proposals in this Impact Assessment, which are for changes coming into force in 2013, relate to England only therefore[4].

32. The key figures that inform the monetisation of options in this Impact Assessment are:

    - 58,000 electrical contractors carry out 2.65 million jobs a year, of which 45% are currently notifiable
    - 95% of these notifiable jobs are done by registered installers
    - DIYers carry out 0.95 million jobs a year, of which 5% are currently notifiable

[3] http://www.communities.gov.uk/fire/researchandstatistics/firestatistics/firestatisticsuk/

[4] Where applicable statistics relating to England and Wales have been adjusted by the relative populations to give an estimate for England only.

- the average building control charge is £246[5] and the accompanying building notice takes 15 minutes (and therefore costs £5) to complete (so that the total cost of submitting a notifiable job to a building control body is £251)
- the average registration fee with a Competent person scheme is £381[6].
- the cost for a registered installer to notify a job to a registration body is £3.50 (£1 in time to complete the form online, and £2.50 in the fee charged by the scheme operator to send the Building Regulations compliance certificate to the householder and a notification to the local authority).

Additional research undertaken since the consultation

33. EC Harris, in conjunction with Adroit Economics, have conducted an update study to analyse the costs of operating and of amending Part P and to revisit the most recent electrical accident statistics and other relevant sources in order to identify the benefits of Part P.

34. In addition, this final stage impact assessment also reflects the views of consultees obtained through the Part P consultation exercise. Evidence submitted through the consultation has been useful in refining the estimated costs of carrying out electrical work and inspections.

Costs and Benefits of Option 0 – 'Do Nothing'

Costs of Option 0 – 'Do Nothing'

35. There are no *additional* costs associated with this option. One of the reasons for reviewing Part P was a view, prevalent in our engagement with external partners, that the costs of Part P were too high and should be reduced.

36. The costs of operating the Part P system fall on two main groups: electricians registered with one of the competent person schemes and unregistered electricians and DIYers.

37. There are two core components to the cost of complying with Part P for registered electricians - the annual registration fee, payable to the scheme operator, and the cost associated with notifying each job to the scheme operator when it is completed.

38. In 2011 EC Harris research suggested that the average cost of registration with a competent person scheme was £381[7]. Membership of competent person schemes currently stands at 39,609 in England and Wales; we have assumed 37,232 are in England for the purposes of this assessment. We estimate that around 13,000 of these memberships are "voluntary" in the sense that approximately this many electricians were members of the schemes before Part P was introduced. Therefore the membership costs of operating Part P have been based on the 24,232 members assumed not to register voluntarily. This suggests a cost in year one from memberships of £10 million. The number of competent person scheme members has been rising by around 1000 memberships per annum and this is assumed to continue over time so the annual cost rises to £11 million in 2022.

39. The counterfactual for this impact assessment must be understood in the context of other changes that are already being made to the operation of the competent person schemes that are central to Part P[8]. In particular the surveillance activities of competent person schemes will in future be on the basis of risk-based inspection: members who have a good track record in inspections and few complaints will be subject to less frequent inspection and members with a poorer track record and/or more complaints will be subject to more frequent inspections. This will reduce the overall cost of running the scheme. This is reflected in this impact assessment in the estimated cost of registration

[5] Based on a survey of Building Control Body charges by EC Harris

[6] Information supplied directly to DCLG by the main scheme operators. We have also taken into account the fact that Competent person schemes will be moving to a system of risk-based inspections whereby members with very few complaints and found to be performing work of a high standard will face a reduced number of inspections and members with more complaints or for whom some issues are noted during inspections will be subject to more frequent inspections. As set out in the impact assessment for changes to the conditions of authorisation for Competent person schemes, this will reduce annual registration costs because the risk based system will focus resources more effectively, reducing the total number of inspections but also improving compliance.

[7] Link to consultation Impact Assessment

[8] See http://www.communities.gov.uk/publications/planningandbuilding/conditionscompetentperson

with a competent person scheme, which is assumed to fall over time as the total number of inspections necessary is reduced[9].

40. In addition, each time a registered electrician completes a job a fee is payable to the scheme operator, estimated for the purposes of this Impact Assessment as £2.50 with the time required to complete the submission costed at £1, giving a total cost per notification of £3.50. With 1,151,822 million jobs carried out per annum[10] the cost to registered electricians is approximately £4million per annum.

41. For unregistered contractors and DIYers the costs of complying with Part P are higher. EC Harris have conducted a survey of 31 building control bodies and have determined that the average charge for dealing with electrical work notifiable under Part P is £246. In addition, completing a building notice is estimated to take 15 minutes and therefore costs £5, giving a total of £251 per job.

42. We estimate that unregistered contractors undertake around 5% of the total number of notifiable jobs done by contractors, around 59,400 jobs. DIYers are thought to undertake around 950,000 jobs per year, but given these are likely to be more minor works we assume that only 5% are notifiable (47,500 jobs).

Table 1 – Summary Table of Costs –Current Operation of Part P

Part P - Current Operation	Number of firms / jobs	Value per firm / job	Year 1 Cost
Part P - Annual Registration Costs	24,232	£381	£9,232,567
Registered Contractors - Cost of Complying with Part P	1,151,822	£3.50	£4,031,377
Unregistered Contractors - Cost of complying with Part P	59,400	£251	£14,909,400
DIYers - cost of complying with Part P	47,500	£251	£11,922,500
		Total	£40,095,844

Source: Adroit Economics

Benefits of Option 0 – 'Do Nothing'

43. There are no *additional* benefits associated with this option.

44. Establishing the benefits of Part P in its current form is difficult, partly due to lack of data, but primarily because the benefits of safer electrical work done since 2005 will only become fully apparent in the future. This is particularly true of the link between electrical installation work and electrical fires, where deficient work might take some time to degrade and become unsafe or dangerous.

45. This section discusses the benefits of the current Part P framework; establishing the potential scale of the benefits from regulation of electrical work is important as it forms the basis for understanding the impact of changing the current framework for ensuring electrical safety.

46. In the consultation stage Impact Assessment the benefits of Part P were based on the research conducted to accompany the original 2004 Regulatory Impact Assessment that was produced when Part P was first introduced. Some of the cost assumptions and other details were updated where new evidence was easily available for the consultation Impact Assessment although the benefits of the policy were not revisited. This impact assessment briefly considers again the available evidence surrounding health and safety incidents relating to electrical installations in dwellings to ensure an appropriate baseline is being used in assessing the deregulatory changes.

47. The 2004 Part P Impact Assessment estimated that annually, in dwellings in England:

[9] We have estimated that this will reduce, in real terms, the cost of membership by £10 per year. This would still allow, in nominal terms, for the cost to remain flat or increase slightly each year.

[10] About 45% of electrical work is thought to be notifiable work, with 95% of this undertaken by registered contractors. Contractors undertake around 2.6million jobs per annum in total.

- electrical accidents caused around 41 fatalities, 2,740 serious injuries requiring hospital treatment, and damage to 6,325 properties
- the introduction of Part P would prevent on average 7.6 of the fatalities (3.3 electric shock and 4.3 in electrical fires), 518 (409 electric shock and 109 in electrical fires) of the injuries, and fire damage to 1450 properties.

48. Fatalities and injuries have been valued in all previous analyses, and in this impact assessment, using standard values based on research conducted by the Department for Transport and widely used across Government. For this final stage impact assessment we have uprated the value of a prevented fatality (VPF) to 2012 to reflect increases in GDP per capita over time as per DfT guidance[11]; the value of preventing a fatality assumed is therefore £1.67 million. Other values used to place a monetary value on avoiding death and injury are reported in table 1.

Table 2 – Assumed values of preventing death or injury

Value of prevented fatality	£ 1,668,817
Minor injury prevented	£ 14,462
Serious injury prevented	£ 187,521
Fire and rescue costs[12]	£5,820

Source: Adroit Economics (figures based on DfT values)

49. Reviewing the relevant statistics on fires and on electric shocks suggests that the estimate made of the impact of Part P in the 2004 RIA may have been optimistic in some respects. The following analysis presents the most relevant statistics relating to electrical shocks in the home and to fires in the home with an electrical origin. The ultimate impact of this review has been to lower the number of fires that Part P is assumed to prevent. It should be stressed that **no new evidence has been forthcoming on the effectiveness of Part P** in relation to preventing electrical fires; the updates merely reflect that a lower base of incidents are assumed to potentially have been caused by deficient electrical work (where Part P has the *potential* to make an impact).

50. This impact assessment therefore relies on the detailed work undertaken to inform the 2004 RIA which analysed the potential for Part P style legislation to have prevented fires of an electrical origin based on a review of fire reports. This indicated that Part P style legislation could have helped to prevent around 30% of fires related to the electrical installation (and almost half of the incidents were categorised as 'Don't know', suggesting there could have been even more cases where Part P type legislation *might* have helped to avert an incident).

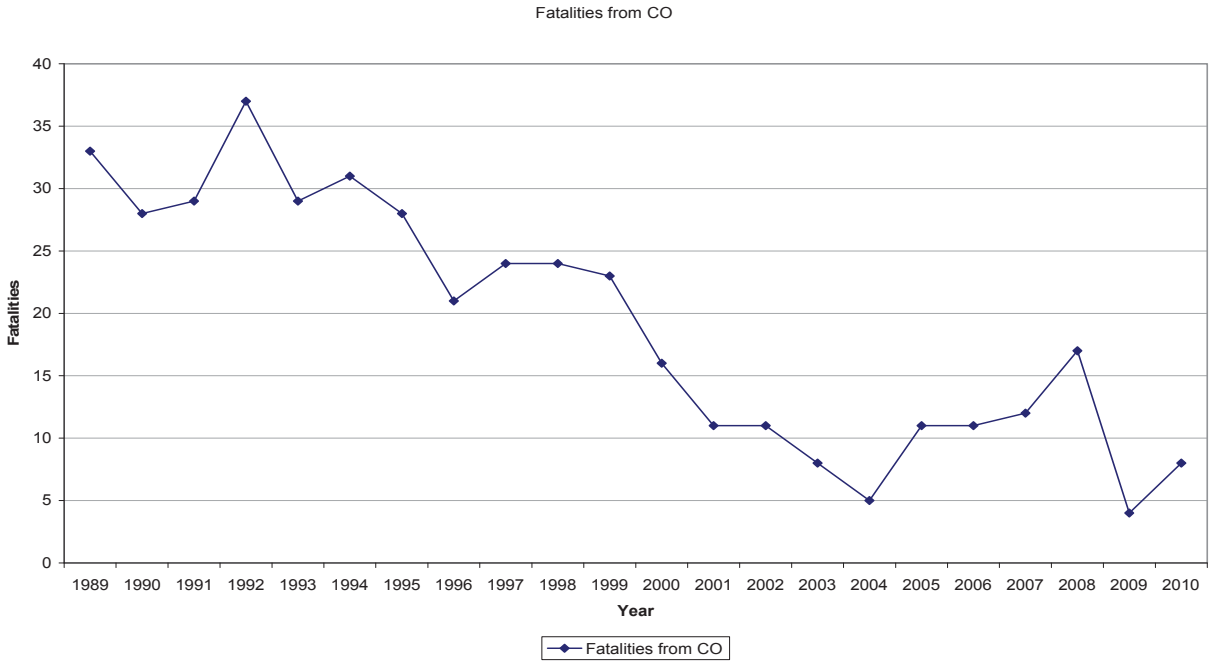
51. Although fire and electric shock statistics suggest there may have been a decrease in incidents since 2005, data is incomplete, and it is not possible to determine how much of the fall is attributable to Part P. Accident rates would be expected to fall anyway as older installations are gradually modernised and residual current devices (which protect against the risks of severe electric shocks) are installed in more homes. Conversely, potential hazards are increasing as more electrical appliances are introduced into the home and the loading on existing circuits increases.

52. Experience of introducing regulation of domestic gas installation work via the CORGI (later Gas Safe) scheme in 1989 shows that there will be a lag between introducing such measures and observing the impact on safety. Figure 1 shows fatalities from carbon monoxide poisoning; it is clear that a review undertaken five years after introduction of the scheme would not have found clear evidence of success. But ten years on a review might have concluded that the scheme was proving successful. The same applies to Part P.

[11] See DfT webtag safety objective guidance for detailed information; http://www.dft.gov.uk/webtag/documents/expert/pdf/unit3_4_1-accidents-05-12.pdf

[12] Based on DCLG 'Economic Costs of Fire', 2008, http://www.communities.gov.uk/documents/corporate/pdf/1838338.pdf, uprated by Adroit Economics to give a value for 2012

Fig 1 – Fatalities from Carbon Monoxide Poisoning, 1989-2010



Source: HSE, Gas Safety Trust, a small number of values have been interpolated where data is unavailable

Electric Shock

53. Electric shock evidence suggests that injuries are most commonly obtained whilst carrying out DIY work. One of the benefits of Part P is that it promotes the use of a competent person to householders and having a regulated standard helps to ensure that people question whether they are competent to do work before carrying it out; this can help prevent electric shock accidents that occur during DIY work.

54. The only data available on this subject is historic and taken from the Home Accident Surveillance System[13]. 27% of electric shock injuries for which the activity was recorded were related to 'electrical maintenance', with a further 10% of those injured engaged in other maintenance or DIY[14]. For electric shock incidents from mains wiring and appliances 33% of injuries were a result of electrical maintenance or DIY.

55. The same is true for fatalities from electric shock. Historic data from the Home Accident Death Database[15] (HADD) indicates that 33% of deaths relating to fixed wiring or appliances with a known activity over 1990-1994 were as a result of electrical DIY work and a further 25% were related to other maintenance or DIY[16].

56. Residual current devices (RCDs), which will prevent most fatal electric shocks if fully functional and installed correctly, were estimated to be present in 62% of homes in 2009, compared to 40% in 2001[17]. There is probably an interaction between installation of RCDs and Part P itself as the latter will help to ensure good practice in electrical installations and this will include correct installation of RCDs and proper inspection and testing of devices that are already part of an installation.

57. For electric shock incidents we have conducted an econometric analysis on the longest time series data available on electric shock fatalities[18] but this analysis does not allow the impact of Part P to be

[13] A former DTI statistical collection

[14] Data from HASS for 1990-1995

[15] Another former DTI statistical collection

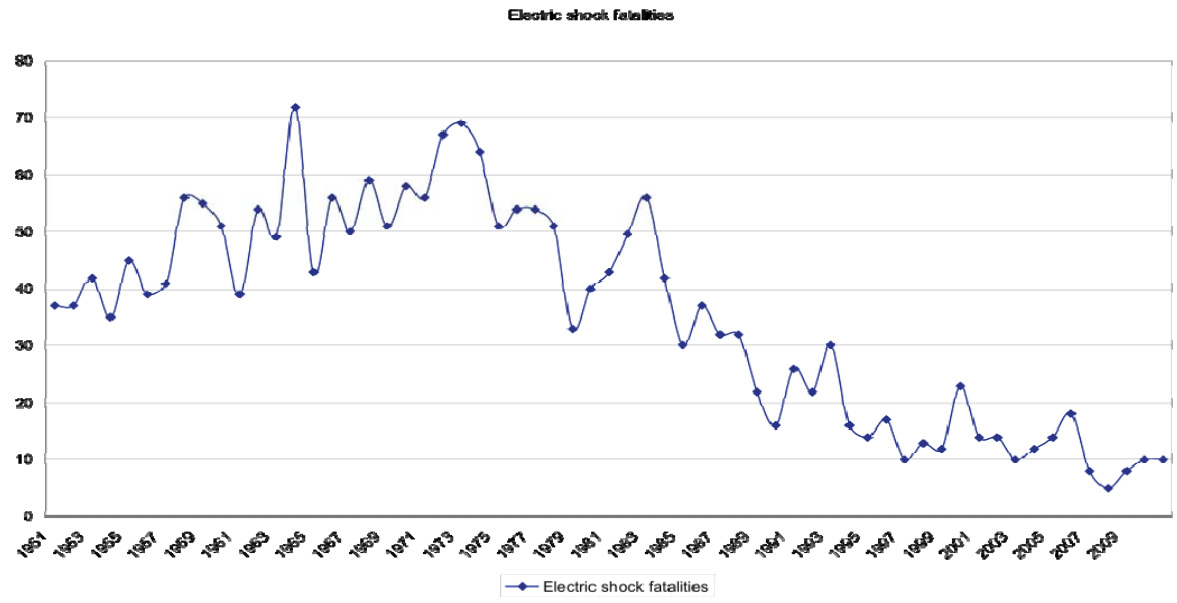
[16] Data from HADD for 1990-1995

[17] http://www.communities.gov.uk/documents/statistics/xls/1937391.xls

[18] Using data from ONS fatality statistics and the discontinued DTI Home Accident Deaths Database

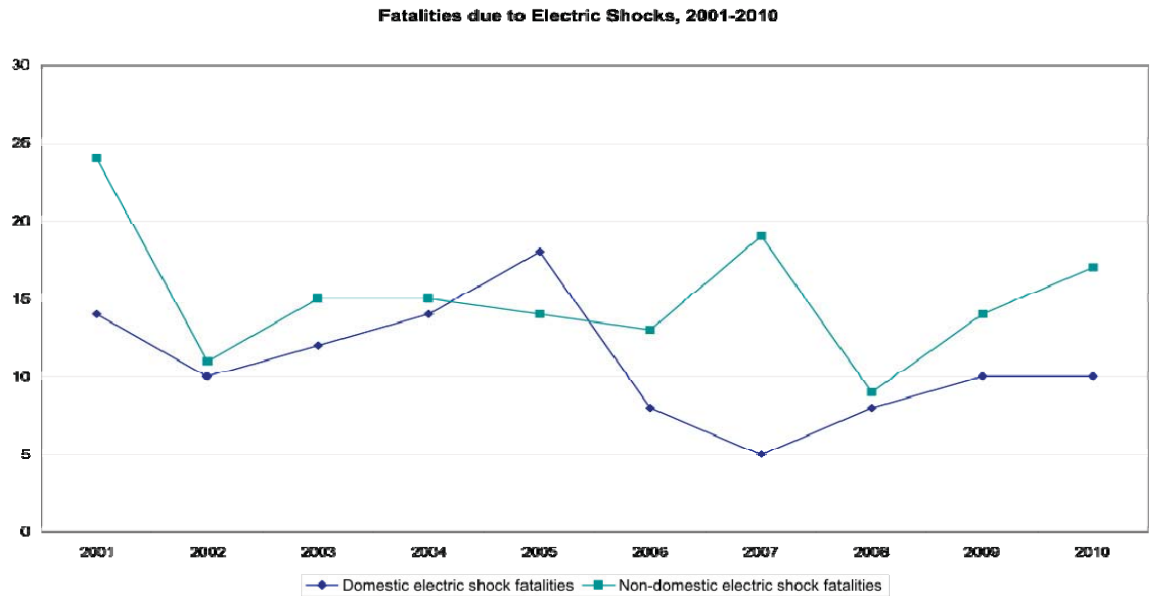
separated from the general trend of improving safety. Furthermore the number of incidents is low and not well suited to this type of analysis. Since so many other variables are changing for which we do not have data, it is not possible to conclude from this definitively that Part P has or has not had an impact on health and safety outcomes. Furthermore, only a proportion of the housing stock will have had electrical work carried out since Part P was introduced so the benefits are likely to continue to build up over time.

Figure 2 - Long term trend in electric shock fatalities in England and Wales, 1951-2009



Source: HADD, ONS mortality statistics

Figure 3 - Short term trend in electric shock fatalities in England and Wales, 2001-2010



Source: ONS mortality statistics

58. Figure 2 presents ONS mortality data on the number of domestic and non-domestic fatalities from electric shock. EC Harris and Adroit Economics have used the data in figure 2 as an indication of the number of incidents that might be avoided as a result of Part P. For non-domestic works there was no change in the data looking at 2001-2005 and 2006-2010. However, for domestic works, which are controlled by Part P, the average number of incidents in the two periods fell from 13.6 per

annum over 2001-2005 to 8.2 per annum over 2006-2010, a decrease of 5.4 (or around 5.0 adjusting figures for England and Wales to give an England only estimate).

59. In their report Adroit Economics have assumed that 50% of the decrease could be attributable to Part P with 50% of the decrease attributable to other factors such as increasing installation of RCDs. This estimate is clearly uncertain and we have subjected this assumption to sensitivity testing later in the Impact Assessment[19].

60. This leads to an overall estimate that Part P prevents 2.5 electric shock fatalities per year. This figure corresponds to the estimate made in the 2004 RIA and reused in the consultation stage Impact Assessment that Part P would prevent 3.3 electric shock fatalities per year.

61. In terms of electric shock injuries the best available evidence remains the information from the HASS which suggested that on average between 1990 and 2002 there were 593 electric shock accidents from the fixed wiring and 1621 from portable appliances. As in the 2004 RIA the best available evidence remains that 30% of mains wiring incidents might be avoided as a result of Part P with 15% of portable appliance incidents also avoided.

62. Hospital Episode Statistics Online now publishes experimental statistics on A&E admissions. This is available from 2007-08 and does appear to show a downward trend. This data must be treated with caution however as they only cover around 75% of A&E admissions and include a large number of invalid records. Since this dataset would include both domestic and non-domestic incidents it does seem to correspond reasonably well with the information based on the HASS.

Table 3 – A&E admissions due to electric shock

Year	Number of electric shock hospital admissions
2008/09	4,021
2009/10	3,514
2010/11	3,341

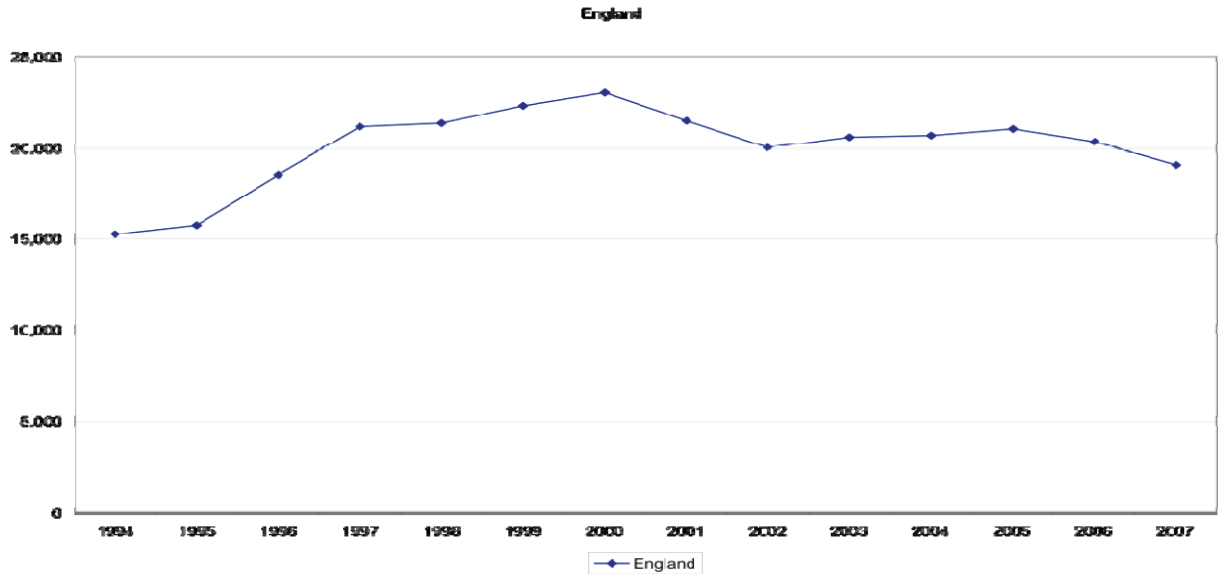
Source: http://www.hesonline.nhs.uk/Ease/servlet/ContentServer?siteID=1937

Electrical Fires

63. Figure 4 shows the number of fires of an electrical origin in England. There is a decrease after 2005, although this dataset includes a large number of incidents where the installation would not have been at fault; electric cooker fires would, for instance, be counted within this total and so it is not ideally suited to addressing the impact of Part P.

[19] The 2004 RIA estimated that 13% of the housing stock would have some form of electrical work undertaken each year[19]. If there is no relation between whether a property has electrical work in one year with whether it has electrical work in the following year then this would suggest that around 60% of the dwelling stock would have had some form of electrical work carried out since the introduction of Part P, which helps to establish the reasonableness of this assumption.

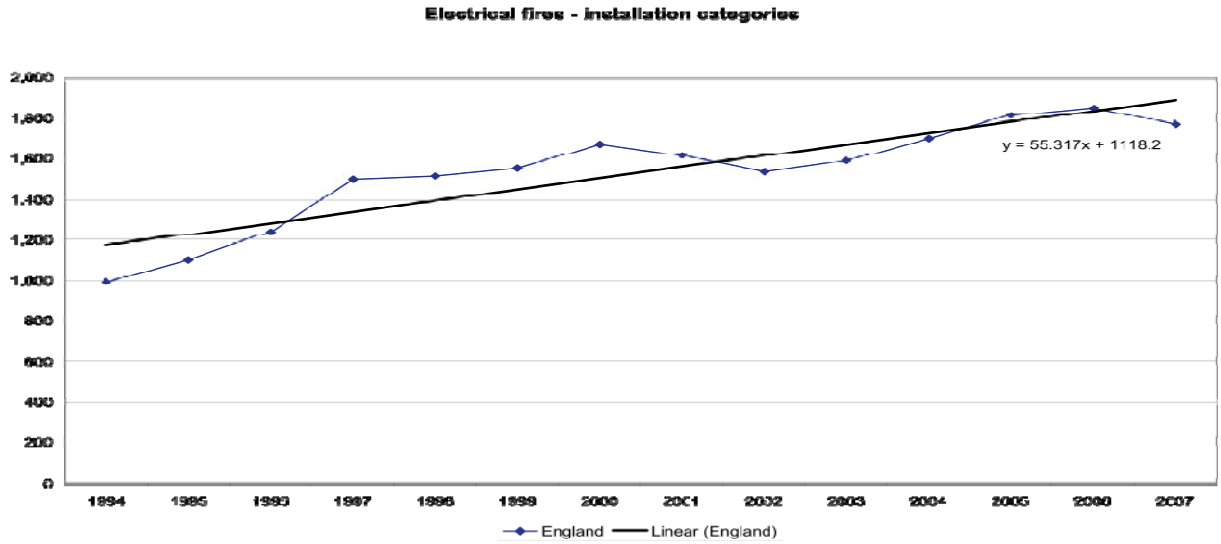
Figure 4 - Fires with an electrical origin



Source: DCLG fire statistics

64. Analysis of only categories specifically linked to the fixed electrical installation or wiring (including mains wiring after the meter, other wire and cables, switchgear, sockets and switches, electric showers and extractor fans) shows an upward trend over time[20]. The analysis is hampered by lack of comparable data after 2007 at which time fire statistics switched to be reported on a different basis. If the results of 2007, which showed a decrease in the number of fires, were to continue this evidence would strengthen the case for maintaining legislation in the vein of Part P.

Figure 5 – Trend in electrical fires where the cause was an electrical installation or wiring category



Source: DCLG fire statistics (custom data)[21]

65. Tables 2 and 3 present the core fire statistics information used by EC Harris and Adroit to estimate the impact of Part P. Table 2 shows the number of electrical fires arising due to various types of fault and the total number of electrical fires. This suggests that on average 33.7% of electrical fires are a result of faulty equipment or supply (rather than, say, misuse by the occupant) and therefore

[20] Note that this analysis is considering only the absolute number of incidents and the number of households is also rising over the period in question

[21] This data is for England only. It excludes certain categories of dwellings such as mobile homes and caravans that are no subject to the building regulations but would typically be reported in fire statistics. There is a filter on the source of power on this data of 'electricity'. This data is not part of the published fire statistics annual and is based on DCLG analysis.

relevant for consideration in this Impact Assessment. Table 3 shows the assumptions regarding the impact of Part P. The total number electrical fires attributable to the mains wiring is 460 with Part P assumed to avert 30%. For other fires, the total number of fires due to equipment faults where Part P could reasonably be assumed to have a potential impact is estimated to be 6800. This assumes that there are 20,172 fires per year with an electrical origin of which 33.7% are related to faults in equipment (rather than, say, misuse by the occupant). Part P is assumed to prevent 15% of such incidents as it seems reasonable to assume that the installation itself is to blame in fewer of these cases. This assumption is also subject to sensitivity analysis later in the Impact Assessment.

Table 4 – Electrical Fires 2010/11 and 2009/10

Electrical Fires - due to faults	All Electrical Fires - 2010/11	All Electrical Fires - 2009/10	Average 2009-11
Faults in equipment or appliance	3965	4017	3,991
Faulty fuel supply	2155	1965	2,060
Faulty leads	632	664	648
All categories of equipment fault	6752	6646	6,699
All fires	19610	20099	19,855

Source: Adroit Economics analysis of DCLG Fire Statistics

Table 5 – Electrical Fires – 1994-2005

	Mains wiring after the meter	Other sources	
Accidental domestic electrical fires in England - 1994-2005	460	20,172	20,632
% related to faults in equipment	100%	34%	
Assumed impact of part P	30%	15%	
	138	1,021	**1,159**

Source: Adroit Economics analysis of DCLG Fire Statistics

66. Adroit Economics analysis of DCLG fire statistics for 2009/10 and 2010/11 indicates that, on average, 0.24% of fires caused by the electrical wiring result in a fatality, 0.85% in a serious injury and 6.63% in a slight injury[22]. This impact assessment therefore assumes that for a fire prevented by Part P, 0.0024 fatalities, 0.0085 serious injuries and 0.0663 minor injuries are also prevented.

Table 6 – Electrical fire fatalities and injuries, 2010/11 and 2009/10

Number of Electrical Fire Fatalities and Injuries	Electrical supply - mains, wiring, plugs - 2010/11	Electrical supply - mains, wiring, plugs - 2009/10	Average	Ratio of accidents to fires
	2,870	2,890	2,880	
Fatalities	7	7	7	**0.24%**
Serious injuries	22	27	25	**0.85%**
Slight injuries	186	196	191	**6.63%**

Source: Adroit Economics analysis of DCLG fire statistics

[22] DCLG fire statistics, http://www.communities.gov.uk/fire/researchandstatistics/firestatistics/firestatisticsuk/

67. Putting these estimates together, we have assumed that the current format of Part P helps to prevent around 2.6 fatalities and 421 injuries due to electric shock and 2.8 fatalities, 10 serious injuries and 77 minor injuries due to electrical fires. The total estimated benefit in year one is therefore £39.8million with a net present benefit over ten years of £425m. Table 7 also shows the estimated benefits of fire prevention in terms of fire & rescue costs.

Table 7 – Estimated benefits of Part P in current format

Part P - Current Operation	Incidents avoided (yr 1)	Value per incident £	Annual value (yr 1)
Electrical Fatalities	2.6	£1,668,817	£4,352,609
Electrical Injuries	421.2	£49,964	£21,044,387
Fire Fatalities	2.8	£1,668,817	£4,700,753
Fire Injuries - Serious	9.9	£187,521	£1,848,744
Fire Injuries - Minor	76.9	£14,462	£1,111,528
Fires avoided	1,159	£5,820	£6,744,908
		Total (Year one)	£39,802,929

Source: Adroit Economics

Summary of Costs and Benefits of Current Operation of Part P

Table 8 – Summary of costs and benefits of current operation of Part P

	Option O
Costs	-£350,380,993
Benefits (H&S only)	£352,994,514
Total Benefits	£425,016,838
Net Benefits (H&S only)	£2,613,520
Net Benefits	£74,635,845

Source: Adroit Economics

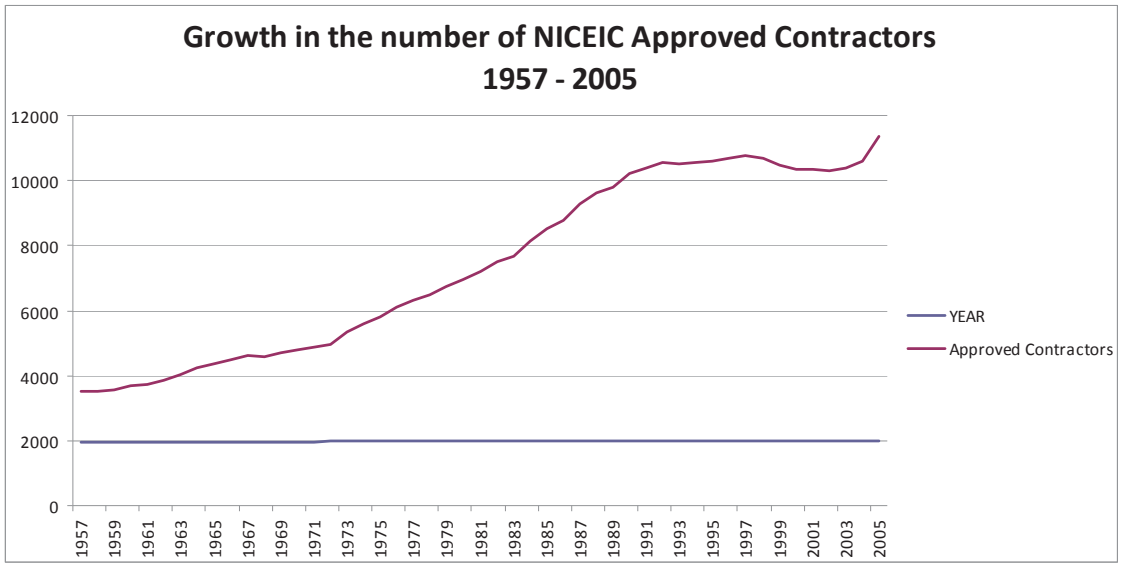
68. As in previous analyses we have assumed an average number of incidents prevented per year. This is perhaps a more reasonable assumption now than in 2004 when Part P was introduced, as a greater proportion of the housing stock would now have had work carried out subject to the requirements of Part P. Of course, we would expect the benefits to build up over a period of time, but the data available are not really sufficient to undertake an approach that recognises this more explicitly.

Wider benefits of Part P

69. The difficulties in analysing the health and safety benefits of Part P mean that consideration should be given to all other relevant sources of information on the quality of electrical work, and therefore the safety of electrical installations. We believe the number of properly qualified firms and businesses that carry out electrical work represents a strong proxy for the quality of the electrical work undertaken. This, in turn, would deliver a reduced likelihood of electrocution and fire and the associated health and safety, property damage and fire and rescue services costs.

70. Figures obtained from the Competent person scheme operators indicates that there are now approaching 40,000 firms registered with Part P schemes – around 27,000 more than were registered with the NICEIC scheme or members of the Electrical Contractors' Association before Part P came into effect. These are all installers who have elected to have their competence assessed and to have samples of their work checked regularly so that they can self-certify compliance with the Building Regulations (and thereby reduce the cost associated with complying with the Part P regime). The number of registered installers continues to increase by around 1,000 each year.

Figure 6 – NICEIC Approved Contractors, 1957-2005



Source: NICEIC

71. DCLG statistics for Part P Competent person schemes show that in the year to September 2010 electrical installers carried-out and self-certified nearly 1.15 million jobs. This is consistent with the estimate in the 2004 Regulatory Impact Assessment that each year electrical contractors carry out around 2.64 million jobs in total, of which around 45% are notifiable; and with the estimate by EC Harris in their February 2011 report to DCLG that 95% of notifiable electrical work is now carried out by registered installers.

72. A survey of nearly 4,000 installers registered with the three main Part P Competent person schemes found that 53% believed that the standard of electrical installation work had improved since the introduction of Part P (39% thought there had been no change). A similar, less wide-ranging survey of interested parties by EC Harris as part of their February 2011 report also found that there had been a perceived improvement in the quality of electrical installation work.

73. Further evidence for increasing installer competence since the introduction of Part P comes from sales of electrical test equipment and awards of electrical qualifications. For example:

    - GAMBICA member companies supply 85% to 90% of professional instruments for electricians in the UK market. Sales of instruments marketed for Part P testing grew by 35% in 2004 and 55% in 2005, and have since grown annually by 15%. Use of such testing equipment is essential to ensure the work that has been carried out is adequate (such testing being required by Part P). This strongly implies that there has been an increase in the proper inspection and testing of electrical installations, which is perhaps the strongest indicator of all that electrical installations are safer than before Part P was introduced.

    - EAL, a body that awards electrical installer qualifications, reports that between 1 January 2008 and 27 June 2011 over 17,500 installers obtained its Domestic Electrical Installer (Part P) qualification aimed at those wishing to carry out domestic electrical installation work.

74. Respondents to the consultation supported the view that Part P has had a positive impact on the quality of electrical installations being undertaken; of those who had a view 64% thought that the standard of electrical work had improved, including 96% of building control bodies that expressed a view. However, improvements were not recognised to the same extent by installers and homeowners.

75. Part P also delivers significant consumer benefits as homeowners do not have the knowledge or expertise to judge whether electrical work is safe and of good quality. Therefore regulation provides consumers with confidence about the work they are paying for and helps avoid market failure. Market failure potentially arises due to information asymmetry as homeowners do not have the expertise to assess whether an electrical installation has been done competently; regulating for minimum standards and using competent person schemes are methods to address this. The Part P regime also includes, via the Competent person schemes, a way to follow up any deficient work and a guarantee that applies to the work even if the company undertaking the work has ceased to exist.

Description of changes to the operation of Part P

76. Option 1 seeks to maintain the benefits related to controlling electrical work while reducing the associated costs. This is done through two routes: firstly, by reducing the amount of work that is notifiable (by making certain lower-risk work non-notifiable); and secondly, by allowing third-party certification of electrical work (as an alternative to using a building control body).

77. In addition to reflecting the above changes, we will take the opportunity to make other minor amendments to the guidance in the Approved Document to ensure it remains up-to-date and current. The changes will include a revised list of notifiable work; new guidance on inspection and testing by third parties; and reference to the latest edition of the national standard for electrical installation work (BS 7671:2008);. However, there are no costs and benefits associated with these changes beyond the benefit of ensuring that the technical guidance properly reflects current practice and appropriate standards.

78. We also intend to make explicit in the fees regulations that local authorities are required to take into account the qualifications of an unregistered, but qualified, electrician who submits their own inspection and testing certificate (whether the work conducted is a DIY project or by way of trade). While local authorities are already able to do this, application is not uniform across local authorities, which is a common complaint particularly from qualified but unregistered electricians. The local authority will retain, however, the ability to decide whether they are satisfied that the electrician is suitably qualified.

Costs and benefits of option 1: retain Part P with changes

Benefits – Option 1: retain Part P with changes

Reducing the amount of notifiable work

79. Reducing the amount of notifiable work leads to lower costs – through a reduction in building control fees for people and firms that are not able to self-certify work and through savings of not having to notify as many jobs for those that are able to self-certify. The savings would be achieved by taking out of the system the lowest-risk types of work.

80. A reasonable consensus was reached within the Technical Working Party for Part P[23] that control wiring could be made non-notifiable without a significant impact on safety.

81. 64% of respondents to the consultation with a view on this issue thought that all work on control wiring could be made non-notifiable. 57% thought the same was true for bathrooms and 54% for kitchens.

82. At consultation stage initial estimates were that for the 2.64m jobs done by electrical contractors the amount of their work that is notifiable would fall from 45% to 40% (equivalent to an 11% reduction) removing approximately 130,000 jobs from being notifiable. This led to estimated annual savings of £430,000 to registered contractors, £1.45m to unregistered electricians and £2.29m to DIYers.

83. In order to improve on these estimates we have used data provided by three competent person scheme operators on the number of times twelve different categories of notifiable electrical work were identified by registered electricians when notifying jobs to scheme operators. The figures are presented in table 9 and cover England and Wales over a three year period.

Table 9 – Types of notifiable work reported to competent person schemes, 2008-10, England and Wales

Types of notifiable work	Number
1. Circuit alteration or addition in a kitchen or special location (eg bathroom or shower room)	1,421,022
2. One or more new circuits	2,757,779
3. Replacement consumer unit	1,233,988
4. Rewire of all circuits	110,170
5. Partial rewire	81,797

[23] A sub group of the Building Regulations Advisory Committee (a statutory committee with responsibility to advise the secretary of state on building regulations) comprised of industry experts.

6. New installation (new dwelling, extension, change of use)	898,661
7. Lighting/power outdoors	74,206
8. Control wiring including that of fire/security/heating/cooling/ventilation systems	1,289,353
9. ELV lighting within the building	16,308
10. Electric floor or ceiling heating system	15,245
11. Installation/alteration of a generator/solar voltaic system	13,885
12. Upgrade or alteration to means of earthing	946,179

Source: NICEIC, NAPIT, ECA

84. When electricians notify a job to their registration body, they tick the categories that best describe the work they have carried out. So, for example, a single job might involve fitting a replacement consumer unit, a new circuit for a cooker, and a new socket-outlet (a circuit alteration) in a kitchen. Installing a new central heating system might also involve alteration work in a kitchen.

85. Not all types of work **within** a particular category will be affected by our policy to reduce the amount of notifiable work. In category 1, for example, we estimate 10% of jobs are in the 'within reach zone' around a bath or shower and so will remain notifiable. Similarly, we estimate 50% of outdoor jobs in category 7 will require a new circuit and will also remain notifiable.

86. The types and percentages of electrical work within the categories 1 to 12 that will become non-notifiable are:

1. Alterations to existing installations in kitchens and in bathrooms outside the 'within reach' zone around a bath or shower (90%)
7. Alterations to existing outdoor lighting and power installations (50%)
8. New central heating control systems (100%)
9. Alterations to existing ELV lighting installations (50%)
10. Alterations to existing floor or ceiling heating systems (10%)
11. Alterations to existing solar PV installations (10%)

87. Table 9 does not in itself provide the reduction in the numbers of notifiable jobs carried out by registered electricians as a result of our policy. It does, however, enable us to estimate the proportion of notifiable jobs that will become non-notifiable. To do this we have had to apply a "duplication" factor to the figures in table 9 (as described in Annex 1) to take account of where work is likely to form part of wider electrical work; and then apply a further reduction based on our estimate of the proportion of work within a given category that will become non-notifiable (as set out above). This process delivers estimates for the reductions in the proportion of notifiable work carried out by registered and unregistered electricians and DIYers shown in table 9A (38%, 45% and 45% respectively). These percentage reductions are then applied to the number of notifiable jobs. DCLG statistics show that there are currently 1,151,822 jobs notified each year by registered contractors. Jobs notified by unregistered contractors and DIYers are estimated based on the assumptions set out in the footnote to the table below.

Table 9A - Impact of Part P policy on the number of notifiable jobs per year

	Registered	Unregistered	DIYers	**All jobs**
Current number of notifiable jobs per year	1,151,822[1]	59,400[2]	47,500[3]	**1,258,722**
% change in the number of notifiable jobs per year as a result of policy	-38%	-45%	-45%	
Number of jobs per year that become non-notifiable as a result of policy	433,940	26,441	21,441	**481,525**

1. Current figure obtained from DCLG Part P statistics.
2. Assumption is 45% of the 2.64m jobs by contractors are notifiable, and unregistered electricians carry out 5% of them
3. Assumption is 5% of the 0.95m jobs by DIYers are notifiable

88. The effects of removing category 8 from the need to notify and reducing the scope of notifications in categories 1, 7, 9, 10 and 11 results in the number of notified jobs decreasing. As shown in table 9A, the impact of this policy is a 38% reduction in notifications for registered installers and a 45% reduction in notifications for unregistered installers and DIYers. The percentage change is higher for unregistered installers and DIYers because we have assumed only registered installers will carry out new installations (category 6 in table 9) due to the complexity of the work.

89. This will deliver an operational cost saving to registered contractors who no longer need to notify such projects to their scheme. We estimate the annual number of notifiable jobs for registered installers will fall by 38% from 1,151,822 currently to 717,882 as a result of this policy. This constitutes an annual saving of 433,940 jobs, each costing £3.50 to notify, and is therefore worth £1.5m per year.

90. There will be larger savings per notification as a result of unregistered contractors and DIYers no longer requiring building control approval (£246 + £5 per job). We estimate there will be 45% fewer notifications for unregistered installers and DIYers based on the impacts to the categories in table 9. For unregistered installers the annual number of notifications will fall from 59,400 to 32,959, an annual saving of 26,441 jobs. There will also be 45% fewer notifications for DIYers leading to the number of notifiable jobs falling from 47,500 to 26,356 notifiable jobs per year, a saving of 21,144 jobs. The impact of fewer notifiable jobs for unregistered installers and DIYers would deliver savings of £11.9 million **if** other aspects of the Part P regime were remaining the same.

91. In addition, anecdotal evidence suggests that alteration work of this type is more likely not to be notified to the building control body in the first place, not least because it is small-scale meaning many householders do not expect it to be subject to the Building Regulations and also because it is difficult for building control bodies to detect that it is being carried out. The “responsible” electricians find themselves, therefore, at a disadvantage when competing for work with those electricians who choose to avoid the cost associated with compliance. Since potentially the most high risk installations are those where the installer is either wilfully intent not to notify work or oblivious to the requirements of Part P, the additional benefits of making the work notifiable are reduced. Equally for competent persons, whose work is regularly assessed, it makes more sense to check a major rewire or new circuit than an alteration that could potentially be quite minor.

Benefits of introducing third-party certification

92. Allowing for third-party certification of work that has been carried out by someone who is not a member of a Competent person scheme is the second route to reducing the burden of Part P.

93. Suitably trained and qualified members of Competent person schemes will in future be permitted to certify the work of others who are not registered electricians, thereby by-passing the building control body entirely. We envisage this will be on the basis of inspection and testing of the finished installation and will not necessarily include an inspection at first fix as assumed in the consultation stage Impact Assessment.

94. We have sought additional evidence on the cost for this type of third-party certification and this has mostly served to confirm the estimate made at consultation of £150. EC Harris have reviewed data on the cost of periodic domestic electrical inspection and testing (now Electrical Installation Condition Report) which has become more common as private renting has become a more common tenure type. They estimate that a competent person would charge on average £120-£150 for an EICR depending on the type of dwelling and this is based on a large sample of EICR costs.

95. Twelve responses to the consultation contained substantive comments on the cost of third-party inspection and testing. Where specified we have used the cost of conducting an EICR, otherwise the given costs of final inspection and testing, which gives an average across responses of £151. In the light of these additional sources of evidence the estimate made at consultation that £150 would cover two visits to an installation was clearly too low. However, as the cost of one visit to carry out inspection and testing it appears to be a reasonable estimate. Third party certifiers carrying out inspection work for a local authority would have public liability insurance, but third party certifiers will be required to have professional indemnity insurance. We have used £150 in the central case, the upper end of the estimates specified by EC Harris, to allow for additional insurance required when carrying out third party inspection and testing. However, such insurance could be acquired by a firm rather than an individual so we would anticipate costs per job would be less than £5. This leads to a conservative estimate of the benefits to business of the policy.

96. As an alternative approach any qualified electrician will be permitted to inspect and test work carried out by unregistered installers, and to issue a "condition report" following only a final inspection of the completed work but which would still be subject to final formal sign-off by the building control body. Our central assumption is that for DIYers this route will be more expensive than using the services of a competent person scheme member: inspection and testing by an unregistered electrician would cost at least 80% of that estimated for a competent person, that is around £120, while the building control sign-off would continue to cost £70, giving a total of £190. However this will lead to significant savings for unregistered electricians who have the necessary qualifications in inspection and testing to produce their own condition report, and therefore would only need to pay £70 to the building control body.

97. A building control body may already accept an inspection and testing report submitted by a qualified electrician, regardless of whether they are a competent person scheme member, as evidence of compliance, but they are not obliged to. In such circumstances the local authority would normally require evidence of the qualifications of the installer. Some unregistered, but qualified, electricians may therefore already be carrying out their own inspection and testing. However, such a scenario would require the installer to have relevant qualifications in inspection and testing so would be unlikely to apply to the average DIYer; our estimated savings are cautious because they assume that no DIYers are able to take advantage of this route. Our proposals will formalise this arrangement and require building control bodies to take into account relevant qualifications of an installer submitting an inspection and testing certificate in determining the extent of compliance checks required.

98. As part of their research EC Harris sampled building control fees for electrical work across a variety of building control bodies with the average fee being £246, which represents a slight increase on the estimate of £231 made for the consultation. Assuming that the accompanying building notice takes 15 minutes to complete gives a total of £251[24].

99. This means that for DIYers the average saving per job through introducing third-party certification is £101 (the average building control fee and notification of £251 minus the cost of third-party certification of £150). After accounting for work that will no longer be notifiable DIYers are assumed to undertake 26,356 notifiable jobs per annum, so the potential saving is £2.8m per year.

100. The saving per job for qualified electricians is £181 (the difference between the current average building control fee of £251 and the £70 fee charged when the inspection and testing report is submitted). Over 32,959 jobs, this produces a total saving of £6.1 million per year.

101. The estimated overall present value benefit is therefore **£191.6** million over ten years.

Table 10 – Summary table of benefits of amending Part P

Benefits of Amending Part P	Number of jobs	Value per job £	Annual value (yr 1)
Reducing the scope of notifiable work			
Savings to registered installers	433,940	£4	£1,518,789
Savings to unregistered installers	26,441	£251	£6,636,748
Savings to DIYers	21,144	£251	£5,307,164
Introducing third-party certification			
Savings to unregistered installers	32,959	£181	£5,965,579
Savings to DIYers	26,356	£101	£2,661,956
		Total PV	**£22,090,236 £191.6 m**

102. For the high scenario we have assumed 10% more electrical work than in the base case (i.e. an improved economic situation) and a lower assumed cost to conducting an inspection and test of £120 (indicated as the average Electrical Installation Condition Report by EC Harris). This gives an estimated present value benefit of £223 million.

[24] The building notice is filled out by the electrician. Time has been costed at £19.50/hr, the mid point of estimates derived from the Annual Survey of Hours and Earnings and the EC Harris fees database.

103. An equivalent low scenario, assuming 10% fewer jobs carried out, would give an estimated present value benefit of £155 million. Neither of these indicative scenarios is sensitive to the *effectiveness* of Part P because of the assumption that competent person scheme members maintain membership and standards.

104. Sensitivity testing indicates that an assumption that 50% of the benefits nominally relating to work performed by competent scheme members in the formerly notifiable categories are lost would reduce the net benefit by £18m-£35m with a central estimate of £28m. This is dependent on the assumptions made about the effectiveness of Part P in preventing electrical incidents.

105. Based on this sensitivity testing we have reduced the estimated net benefit in the low scenario to £130m to capture the additional risks on this side.

Costs – Option 1: retain Part P with changes

Transition Costs

106. Retaining Part P with changes would bring with it a transition cost, as electrical installers and building control bodies would need to become acquainted with the new Part P regulations and guidance.

107. We have assumed that on average 1.5 qualified supervisors or engineers in 58,000 registered and unregistered firms, and 3,300 local authority building control officers would need two hours to become acquainted with the changes. We have assumed an hourly rate for building control staff of £41 per hour and £19.50 per hour for electricians. This leads to transition costs of £2.95m to electrical firms and £270,000 to local authority building control.

108. Competent person schemes will already be gaining UKAS accreditation as a condition of authorisation for the schemes and we have assumed for the purposes of this impact assessment that this cost will not increase as a result of extending a scheme to allow for third party certification of electrical work alongside self certification (since processes will be similar as those for qualified supervisors). The vast majority of those registering to carry out third party inspection and testing are likely to be registered installers meaning there shouldn't be additional costs to registering as a third party inspector and tester.

109. **Transition costs in England are estimated, therefore, to be approximately £3.2m.** These one-off costs are likely to fall primarily in 2013.

Table 11 - Transition costs

	No of firms or BCBs	Total no of persons	Hourly cost	Transition cost (£)
Sole traders	24,232	24,232	£19.5	£ 946,447
Fewer than 5 employees	28,716	28,716	£19.5	£ 1,121,580
More than 5 employees	7,604	22,811	£19.5	£ 890,959
Building control bodies	305	3,300	£41.0	£ 270,600
			Total	**£ 3,229,586**

110. For the low scenario hourly wage estimates are based purely on the Annual Survey of Hours and Earnings and for the high cost scenario they are based purely on estimates from the EC Harris fees database. This gives a range of £2.9m to £3.6m.

111. The EC Harris database has been used as a source of evidence on the cost for workers in the construction industry. This reflects the value by the market of a professional including wage, on costs and other business costs to the organisation. This approach is widely used in the construction industry. However, there is a risk that this may overstate the cost savings. For instance in some situations, the saving may result in the professional being employed for fewer hours and delivering less than the full business cost savings assumed in the charge out rates. We have therefore also used the Standard Cost Model to estimate costs based upon the Annual Survey of Hours and Earnings (ASHE) plus an additional estimate of 30% for additional overheads such as pension

contributions and national insurance contributions[25]. It is our assessment that this approach underestimates typical benefits of time for professionals in the construction industry.

112. So for our central estimate we have assumed an hourly rate half way between the EC Harris industry estimate and the ASHE plus 30% approach. We feel this estimate reasonably reflects that some time savings of key professionals have a high value reflected in the charge out rate for carrying out other priorities while in other situations the business cost saving might be more constrained.

Ongoing Costs

113. Assessing potential costs to an amended Part P regime is not straightforward as it is, in the absence of robust supporting evidence, primarily dependent on the assumptions made about the impacts on levels of risk brought about by changes to the regulations. The discussion on pages 8-10 has outlined some of the specific issues in this regard and highlighted some of the tangential evidence that must be taken into account when considering the health and safety impacts of the Part P regime.

114. We estimate that the policy will reduce the amount of notifiable work by around **45%**. We have been able to refine this estimate since consultation stage using the data provided by the scheme operators on the number of notifications in the various categories, allowing us to estimate more accurately the impact of removing alteration work and control wiring from the requirement to notify building control. This is assumed to have **no impact** on the installations done by competent persons; a sample of their work will remain subject to inspection regime and we think it is reasonable to assume that minor works will also be done competently by such installers, regardless of whether a specific job is notified to the scheme or not. We have subjected this assumption to sensitivity analysis under 'risks and assumptions'.

115. Given that the costs of working as an unregistered installer (£70 per job[26]) would quickly become unfavourable in comparison to registering with a competent person scheme we have continued to assume the same level of scheme membership when the requirements come into effect.

116. For unregistered installers and DIYers the proposal will remove the checking of such work, which we estimated could amount to around 48,000 jobs becoming non-notifiable, although still required to comply with Part P standards. Adroit Economics assigned each a risk rating (high/medium/low) and a compliance rating (high/medium/low) to different categories of electrical work in order to estimate the impact in monetary terms that might be expected from making such work non-notifiable. Using this approach to reflect the risk of different categories suggests that reducing the scope of notifiable work might reduce the benefits in relation to that work by around 12%. Because new circuits will continue to be monitored most major electrical work will continue to be subject to the requirement to notify or use third-party inspection and testing. Overall, however, since the majority of the benefits come from guaranteeing the quality of work via the use of registered installers, who carry out more than 90% of jobs, the impact on the total benefits is likely to be small; we estimate 1% based on the assumptions outlined above, giving an annual cost of **£0.5m** per year and net present cost over ten years of **£4 million**. This is consistent with, indeed slightly higher than, the estimate made for the consultation stage impact assessment.

117. We have undertaken sensitivity testing on the assumptions set out here under 'risks and assumptions'.

118. Given that the building control costs of working as an unregistered installer (£70 per job) would quickly become unfavourable in comparison to registering with a competent person scheme we have continued to assume the same level of scheme membership when the requirements come into effect.

119. The other element of the Option 1 amendments is providing the opportunity for greater third-party certification. However, we contend that this option only provides an alternative mechanism to ensure adequate checks on notifiable work are done, and will not result in any reduction in ensuring the work is adequate; most local authority building control bodies would usually contract out such work to a competent electrician anyway.

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[25] Cabinet Office, Standard Cost Model, 2005, http://www.berr.gov.uk/files/file44503.pdf

[26] Assuming the installer has the qualifications to do their own inspection and testing

120. This proposal was widely supported in the public consultation – 83% of those with a view were in favour of allowing third-party certification of electrical work.

121. Promotion of the schemes is now a requirement for the conditions of authorisation for a competent person scheme and this will help to increase the benefits of Part P yet further – by making clear that electrical work is required to meet the standards set out in Part P and promoting the use of competent electricians to carry out that work.

122. Increasing promotion of the schemes will mitigate against any risks arising from reducing the scope of notifiable work under Part P. We believe that promotion of competent person schemes and use of registered electricians, and education of householders about Part P generally, are more likely to deliver significant health and safety benefits than keeping the requirement for work in kitchens and bathrooms to be notified to building control.

Summary table of costs

Table 12 – Summary of costs of amending Part P

Costs of Amending Part P	Annual value (yr 1)
Transition costs	£3.2
Potential impact on health and safety benefits	£0.5

Summary – Option 1

123. Based on the figures above, therefore, amending Part P would produce a net benefit of **£184.3 million over 10 years** (£191.6m less one-off costs of £3.2m and ongoing costs of £4.0m).

Summary table of costs and benefits

Table 13 – Summary table of costs and benefits of amending Part P

Costs and benefits of amending Part P	NPV (10 years)
Transition costs	-£3.2
Estimated decrease in health and safety benefits	-£4.0
Savings from reducing scope of notifiable work	£191.6
Net present benefit	**£184.3**

Direct costs and benefits to business calculations (following OIOO methodology)

124. For the preferred Option 1 the present value cost to business is estimated at £3.0m, arising purely from the transition costs, while the present value benefit is £123.6m, giving a net benefit to business of £120.6m. This is a benefit to registered electrical installers, who will no longer be required to notify some minor works, and to unregistered electrical installers who will no longer have to notify minor works to building control and who will also be able to use third party certification. Any costs or benefits falling on DIYers or on local authority building control have been excluded from the cost to business calculation.

125. This translates to an annual equivalent net benefit to business of **£14.0m** at 2012 prices (or £12.9m at 2009 prices).

Risks and Assumptions

Consideration given to alternative options

126. This impact assessment has considered the costs and benefits of Part P relative to the counterfactual of the current Part P regime. The costs in such a scenario are any increases in

accidents, and the benefit is the reduction in the cost of the regime. Table 14 compares the estimated costs and benefits of the amended Part P regime with the current regime.

127. Table 14 also shows the more limited deregulatory proposal that we also considered, removing only work on control wiring from the requirement to notify building control. We have labelled this 1a as it differs from the preferred option only in that alteration work in kitchens and bathrooms would remain non-notifiable.

128. At consultation stage we also considered an option of fully revoking Part P, which garnered little support in the public consultation. Most respondents felt that Part P had been a step forward in ensuring safe electrical installations and to remove it was not advisable, although there were some suggestions for a regulatory regime that looked different to Part P but with the same objectives. The cost-benefit case for complete revocation is clouded by uncertainty over how persistent the benefits would be over the appraisal period; consultees agreed with our assessment that removal of Part P would lead to a sharp drop in the number of registered competent persons and an ongoing fall back to, or close to, historic levels of voluntary registration.

Table 14- Summary of options considered: net present costs and benefits over 10 years (£m)

	Option O	**Option 1a**	**Option 1**	**Revoke**
	Base Case	Denotify control wiring and Introduce third party certification	Denotify control wiring and kitchen/bathroom alterations and Introduce third party certification	Revoke Part P
Costs	-£350m	-£181m	-£159m	-£17m
Benefits (H&S only)	£353m	£351m	£350m	£178m
Total Benefits	£425m	£422m	£421m	£214m
Net Benefits (H&S only)	£3m	£170m	£191m	£160m
Net Benefits	£75m	£241m	£262m	£197m

Source: Adroit Economics

129. The assumptions used to cost the regulatory framework (such as the cost of carrying out inspection work or having work approved by a building control body) are believed to be robust and most cost estimates have been either validated or updated as a result of the consultation exercise. The benefit of Part P in terms of health and safety is more difficult to reach firm conclusions upon and so we have subjected our analysis to sensitivity testing.

130. The most significant uncertainty in the results presented is around the impact of reducing the scope of notifiable work. We have therefore provided further analysis to investigate how the assessment would change when key assumptions are varied, in particular regarding the response of registered installers to the amendments and the effectiveness of Part P in preventing fires and electric shock incidents.

Sensitivity Testing

131. Our central estimate assumes no loss of benefit relating to the work currently performed by registered competent persons. Registered electricians are assumed to remain members of competent person schemes and to undertake work to the same standard. This is the central estimate because the changes will not materially alter the incentives for practising electricians who carry out a variety of electrical installation work to register with a competent person scheme. The cost of using building control (at least £70 per job) would quickly become unfavourable compared to the cost of operating as a member of a competent person scheme, for anyone undertaking more than five new circuit installations per year. Equally although work might be non-notifiable a sample

of more complex work is being checked and competence assessed, therefore it seems reasonable to assume that such work will still be completed to the required level.

132. As a first sensitivity test we have indicated the benefits of the overall Part P regime if 50% of benefits nominally attributed to the de-notified categories were lost. Just because a firm chose to deregister does not, of course, mean that the electrical installation would not be done properly but it illustrates the potential for greater loss of health and safety benefits than in our central case. An assumption that 100% of the benefits nominally attributed to this sort of work are lost is also shown in the table, although this seems an overly extreme assumption.

133. Table 15 and Table 16 show the NPV of the current Part P operation under the specified set of assumptions. The right hand three columns express NPV of the amending options relative to this counterfactual.

Table 15 – Sensitivity test on the assumption that no benefits are lost in relation to formerly notifiable work carried out by registered installers (NPV over ten years, £m)

	Current	3rd party and denotify control wiring	Chosen policy option	Revoke Part P
No change on work currently done by registered installers	£75m	£163m	£184m	£119m
50% of benefits nominally from this work lost	£75m	£148m	£157m	£35m
100% of benefits nominally from this work lost	£75m	£134m	£114m	-£49m

Source: DCLG analysis

134. Secondly we have investigated the impact of assumptions made regarding the effectiveness of Part P in preventing electrical fires and shock incidents, since these assumptions are uncertain. If Part P is less effective than assumed in the central case, then the case for revocation is stronger. In this scenario we have assumed that only 25% of the recent fall in electric shock fatalities can be attributed to Part P, 20% of relevant mains wiring fires could be prevented, and 10% of other electrical fires[27]. These estimates are within the range of uncertainty around the central estimates.

Table 16 – Sensitivity test on the cost effectiveness assumptions (NPV over ten years, £m)

Sensitivity test with low effectiveness assumptions	Current operation of Part P (NPV)	3rd party and denotify control wiring	Chosen policy option	Revoke Part P
No change on work currently done by registered installers	-£75m	£164m	£186m	£193m
50% of benefits nominally from this work lost	-£75m	£155m	£168m	£138m
100% of benefits nominally from this work lost	-£75m	£145m	£140m	£84m

Source: DCLG analysis

135. Revocation of Part P would become the most beneficial option under low cost effectiveness allied to our central assumptions, but would be displaced as the leading option if it were assumed that there is an impact on the benefits stemming from formerly notifiable work carried out by registered electricians. Option 1 therefore appears to strike a reasonable balance between the different elements.

Wider impacts

Equalities Impact Test

136. An initial equalities screening of the proposed policy was carried out and determined that a full equalities impact test was not required as the proposal does not adversely affect any minority groups.

Competition Assessment

137. The proposed policy aims to reduce the cost and bureaucratic burden that Part P imposes on businesses. Registered installers will benefit from not having to notify minor jobs, reducing the

[27] Compared to 50%, 30% and 15% respectively.

ongoing costs of operating their business. Unregistered installers will gain an even bigger benefit from this change as they would otherwise have had to pay building control fees on these jobs.

138. Primarily unregistered installers will benefit from being able to use third-party inspection and testing via a competent person scheme member, at lower cost than going through local authority building control. Unregistered installers will also benefit from lower costs as they will have greater opportunities to submit their own inspection and testing certificates to their local authority building control department where the local authority is satisfied with their qualifications and/or experience.

Small Firms Impact Test

139. The proposed policy aims to reduce the cost and bureaucratic burden that Part P imposes on electrical installers – a part of the construction industry particularly characterised by small businesses and sole traders.

140. Since none of the technical requirements are changing the transition costs are minimal as they only relate to the *process* of carrying out and approving work and not to the design and installation techniques.

Environmental Impact Tests

141. It has been determined that this policy will not result in additional greenhouse gases being emitted and will have no impact on the wider environment.

Social Impact Tests

142. We do not expect the proposal to have any social implications.

Sustainable Development

143. We do not expect the proposal to have any sustainable development implications.

Annex A

Categories of Notifiable Work

Types of notifiable work and numbers of notified jobs between 2008-10	Jobs notified
1. Circuit alteration or addition in a kitchen or special location (eg bathroom or shower room)	1,421,022
2. One or more new circuits	2,757,779
3. Replacement consumer unit	1,233,988
4. Rewire of all circuits	110,170
5. Partial rewire	81,797
6. New installation (new dwelling, extension, change of use)	898,661
7. Lighting/power outdoors	74,206
8. Control wiring including that of fire/security/heating/cooling/ventilation systems	1,289,353
9. ELV lighting within the building	16,308
10. Electric floor or ceiling heating system	15,245
11. Installation/alteration of a generator/solar voltaic system	13,885
12. Upgrade or alteration to means of earthing	946,179

This data covers 2008-10 so we have divided by three to give an annual estimate of the number of jobs. A single project could be notified under more than one heading (so it could still be a notifiable project even if one of the categories was removed from notifiable status). Our key assumptions about duplication are below. This is only material to the results of the assessment for the largest categories.

- 30% of alterations in a special location are projects that also include a new circuit.
- 14% of new circuits relate to control wiring.
- 50% of work outdoors involves a new circuit
- 90% of ELV lighting and electric floor or heating systems is duplicated with new circuits
- 100% of upgrades to the means of earthing are duplicated with other notifications.

Title: Evaluating Access Statement Requirements in Part M of the Building Regulations and Minor Technical Amendments to Part M of the Building Regulations **IA No:** DCLG 0079 **Lead department or agency:** Department for Communities and Local Government **Other departments or agencies:**	**Impact Assessment (IA)** **Date:** 17/12/2012 **Stage:** Final **Source of intervention:** Domestic **Type of measure:** Secondary legislation **Contact for enquiries:** Richard Harral

Summary: Intervention and Options

RPC Opinion: Validated by RPC

Cost of Preferred (or more likely) Option				
Total Net Present Value	**Business Net Present Value**	**Net cost to business per year** (EANCB on 2009 prices)	**In scope of One-In, One-Out?**	**Measure qualifies as**
£20.6m	£18.9m	-£2.0m	Yes	OUT

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

Part M (Access to and use of buildings) sets out minimum requirements to ensure that a broad range of people are able to access and use facilities within buildings. Building Regulations provide flexibility in determining what level of provision is reasonable on a case by case basis. Applicants need to communicate their proposals effectively but the existing 'one size fits all' guidance in Approved Document M, relying on submission of detailed Access Statements could be made more effective and efficient by replacement with a risk based approach. This will improve compliance and reduce cost to Industry, and as a statutory document the guidance can only be amended by Government intervention.

What are the policy objectives and the intended effects?

This policy will develop guidance on the most effective way for applicants to communicate and agree adequate provision for access to and use of buildings where works are subject to Building Regulations. Revised guidance will move towards a graduated, risk based approach proportionate to varying scale and type of development and away from reliance on Access Statements as the only tool to communicate compliance This will eliminate unnecessary bureaucracy and cost to Industry whilst maintaining outcomes for the broadest range of users. Minor technical amendments suggested in the consultation are also being taken forward. Revised guidance will be made in October 2012 and come into effect in April 2013.

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

'Do Nothing' – Do nothing would continue to recommend the use of Access Statements which research has shown to often be ineffective and to generate unnecessary paperwork.
Preferred Option - Amend Approved Document M. Identify the most efficient approach to agreeing reasonable provision for access to and use of buildings. Engagement with Industry indicates a consensus that providing guidance on communicating and agreeing compliance remains desirable and beneficial, but that a more efficient, risk based approach could reduce administrative costs and improve quality of delivery. This IA focuses on streamlining of existing regulatory process but we will also be taking forward supporting work in parallel to improve industry engagement and skills. Minor deregulatory technical amendments to Approved Document M are also being taken forward.

Will the policy be reviewed? It will be reviewed. **If applicable, set review date:** 04/2016

Does implementation go beyond minimum EU requirements?			No		
Are any of these organisations in scope? If Micros not exempted set out reason in Evidence Base.	**Micro** Yes	**< 20** Yes	**Small** Yes	**Medium** Yes	**Large** Yes
What is the CO_2 equivalent change in greenhouse gas emissions? (Million tonnes CO_2 equivalent)			**Traded:** Nil	**Non-traded:** Nil	

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 the responsible Minister:  Date: 17 Dec. 12

Summary: Analysis & Evidence

Policy Option 1

Description: Revise guidance to support more targeted and risk based compliance and take forward minor technical amendments to Approved Document M

FULL ECONOMIC ASSESSMENT

Price Base Year 2012	PV Base Year 2013	Time Period Years 10	Net Benefit (Present Value (PV)) (£m)		
			Low: 8.2	High: 46.4	Best Estimate: 20.6

COSTS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	0.9	1	Optional	**0.9**
High	4.2		Optional	**4.2**
Best Estimate	2.1		0	**2.1**

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

Transitional costs monetise the time required for professionals to acquire and familiarise themselves with revised guidance (£0.6m) and a supplementary cost associated with the development of revised approaches to guidance within individual businesses (£1.0m) and role out of training to staff (£0.5m).

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

None

BENEFITS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	Optional		1.1	**9.1**
High	Optional		5.9	**50.6**
Best Estimate	0		2.6	**22.7**

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

Reduced administrative cost to industry by; i) reducing the quantity of information required by adopting a risk based (rather than proforma) approach, and, ii) providing greater flexibility in choosing method of communication. This will result in an average annual benefit of £1.0m. Consolidating guidance on temperature of handrails delivers a further saving of £1.6m per annum. Please see the tables in the evidence base for a detailed breakdown of predicted reductions in cost of demonstrating compliance.

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

Reduction in on-site post completion enforcement costs (including costs of abortive design and building work) as a result of more effective communication between applicants and Building Control Bodies.

Key assumptions/sensitivities/risks **Discount rate (%)** 3.5

Savings are based on estimated frequency and time spent in preparing and reviewing Access Statements which are based on external research. Costs and savings also assume that Industry will adopt the most effective and proportionate approach on a case by case basis, once more flexible guidance is introduced. Furthermore it is assumed that there will be no change in the level of provision as a result of these changes which is supported by research findings.

BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:			In scope of OIOO?	Measure qualifies as
Costs: --0.24	Benefits: +2.44	Net: +2.20	Yes	OUT

Evidence Base (for summary sheets)

Problem under Consideration

Background on the Building Regulations

The Building Regulations control certain aspects of building work principally to protect the health, safety and welfare of people in and around buildings. Part M of Schedule 1 of the regulations relates to access to and use of buildings and Approved Document M (AD M) contains statutory guidance that demonstrates one way in which the provisions can be complied with.

The regulations themselves are expressed in “functional” terms and do not dictate how compliance must be achieved. However, for the benefit of both industry and building control bodies, advice on how the requirements of the Building Regulations may be met are contained in guidance approved by the Secretary of State. This covers some of the more common building situations, but there may be alternative ways of achieving compliance with the provisions. However, if followed, the guidance can be relied upon in any proceedings as tending to indicate compliance with the Building Regulations.

AD M is supporting guidance for Part M of the Building Regulations (Access to and use of buildings) which seeks to ensure that reasonable provision is made for a broad range of users to access and benefit from the provision of suitable facilities where building work takes place. The 2004 edition of AD M introduced for the first time the concept of an Access Statement, which is recommended ‘to identify the philosophy and approach to inclusive design adopted, the key issues of the particular scheme and the sources of advice and guidance used’.

Beyond compliance with the Building Regulations, employers and service providers also have duties under the Equality Act 2010 (previously the disability Discrimination Act or DDA) to make reasonable adjustments to physical features of buildings which could otherwise prevent access for disabled people. Making sound judgements as to reasonable provision at the point where building work is undertaken therefore not only benefits future building users by ensuring that appropriate access and facilities are provided, but also helps industry to reduce the likely need for expensive retro fit costs once the building is occupied.

The Problem

Building Regulations control a wide variety of types of work including the erection of new buildings, and the extension or alteration of existing buildings, in both domestic (residential) and commercial sectors. Works range in scale from small modifications to components and fittings – for instance replacing a door or window – to large stand alone buildings and multi-building complexes.

The functional (rather than prescriptive) structure of the Building Regulations mean that whilst following the guidance in Approved Documents is regarded as tending to show compliance, alternative solutions can be proposed providing that they satisfy the Building Control Body that the level of provision is ‘reasonable’ and satisfies the functional requirements of Part M in each particular instance. This provides flexibility to take into account both the nature and scale of development as well as constraints and the needs of likely users.

As a result, the level of provision from one project to the next can vary significantly whilst still being considered to demonstrate compliance. Access Statements were introduced with the intention of improving communication between designers, applicants and Building Control Bodies at the design stage of building work and in particular to provide a structured approach to determine what is reasonable on a case by case basis.

Following extensive discussions with external partners it is clear that the current one size fits all approach to demonstrating compliance by submitting Access Statements has not proven effective across all types and scale of building work. In particular, Access Statements are less effective in relation to smaller and less complex works where developers, designers and builders do not have the expertise or resources available in larger scale projects. As a result, Access Statements accompanying some applications add administrative cost but are not very useful in conveying the proposed approach to achieving compliance nor in improving the quality of access in the resultant building work. In such cases, Building Control Bodies often prefer to rely on other information as a means of assessing compliance

and access statements represent an unproductive administrative burden as a result. Given that a large proportion of building work is of a smaller scale (we estimate that 76% of all building work is less than £25,000 in value) this has an important impact on quality and cost of compliance in the built environment as a whole.

Ensuring that Building Control Bodies and applicants are agreed on reasonable provision prior to commencing building work is also important in terms of quality and cost of outcomes;

- Firstly, that physical features which help ensure good access can be hard to integrate effectively once construction work has commenced and doing so can lead to compromised solutions which reduce the resultant quality of access.
- Secondly, that making changes to designs during construction creates costs to applicants in terms of disruption and abortive work which can otherwise be avoided.

The policy changes in question set out a more flexible, risk based approach which reflects varying scales and types of building work and which can reduce administrative burden and cost to industry, whilst improving quality of compliance**.**

Results of the Consultation

67% of respondents agreed with our assessment that the proposed changes to AD M would not impact the level of compliance and comments were largely supportive of the changes and the drive to achieve compliance at a lower cost and reduce unnecessary paperwork. The consultation specifically asked for the views of respondents on the assumptions presented in the consultation stage impact assessment; the vast majority agreed with the estimates presented. Further details are given in the 'Risks and Assumptions' section of this impact assessment.

This IA also covers the impact of a series of minor changes to existing guidance in AD M which were identified by consultation respondents as either having been superseded in practice since AD M was last updated in 2004 (such as references to defunct or outdated British Standards) or have been modified by supplementary guidance issued by DCLG in the form of FAQ's. Respondents suggested that the proposed changes (relating to Light Reflectance Values) would avoid unnecessary administrative costs without reducing compliance.

We have assessed the impact of these changes and consulted the Building Regulations Advisory Committee (BRAC), the statutory committee that provides advice to the Secretary of State on Building Regulations. Prior the consultation DCLG had an extensive programme of engagement with external partners through a series of informal workshops and meetings. 10 Workshops were held involving over 100 access consultants, building control surveyors, designers and disabled people to seek their views. A range of opinions were offered which have underpinned our policy to seek greater flexibility in demonstrating compliance – particularly for smaller and more simple works – whilst allowing applicants to continue to utilise Access Statements where they are perceived as being of value.

The overall outcome in terms of what the building control officer deems reasonable provision should remain the same regardless of whether an access statement is produced or not. This aligns with the approach set out by the Star Chamber during the Building Regulations element of the red Tape Challenge where we have been urged to take forward de-regulatory or simplification measures in response to the consultation.

Rationale for Intervention

Part M helps to deliver an equality objective in ensuring suitable access to buildings. Due to lock-in issues, mandating that access is suitably thought through at the point of build is much more cost effective than later making modifications to buildings. The policy intervention aims to continue to deliver the benefits of reasonable access provision but to do so at a lower cost by removing unnecessary or unproductive work.

In 2010 DCLG invited the public to comment on what future changes should be made to Building Regulations and the Building Control System. We received 67 submissions in relation to Part M varying from calls for additional measures in housing design (lifetime homes) and adult sanitary provision for people with high assistance needs (Changing Places) to detailed analysis of the functionality of existing

guidance in use. Whilst respondents indicated that the scope of AD M was broadly correct, there was some concern as to the quality of compliance and the way in which Access Statements were being used to establish reasonable provision. In December 2010 DCLG therefore committed to reviewing how effective the existing recommendation to use Access Statements has been in day to day use and whether or not there is a need to consider changing the existing guidance and approach.

Extensive dialogue with a broad range of professionals involved in the preparation and use of Access Statements has resulted in detailed anecdotal evidence with some strong indicators, consistent across Industry. This suggests the need to encourage a flexible approach which responds more effectively to the range of skills and expertise available in varying scales and types of building work, rather than relying on Access Statements as the only way of communicating compliance.

Adopting this revised approach will deliver a measure of de-regulation and simplification as well as helping applicants and Building Control Bodies to focus resources on key compliance issues on a case by case basis. Enabling this shift in behaviour will be difficult if existing guidance is retained, as Building Control Bodies and applicants are likely to be deterred at least in part by the risk of adopting approaches outside those that remain within statutory guidance.

Because the guidance in Approved Document M (Access to and use of buildings) is considered statutory guidance, revisions to promote more efficient and effective behaviour necessitates amendments which can only be facilitated by Government intervention.

Policy objective

Part M of the Building Regulations is intended to ensure baseline standards to enable a broad range of people to access and use buildings and their facilities. The guidance sets out what are considered to be proportionate provisions in the most common of circumstances.

These objectives remain relevant. The aim of this current proposal is to learn from the experience of the way Access Statements have been used since 2004 to develop a more effective, efficient and proportionate approach to communicating compliance which targets risks and reduces cost.

We consulted on these proposals in December 2011 with a view to making changes to guidance in October 2012, coming into force April 2013.

Description of options considered

Option 0: 'Do Nothing'

Leaving the guidance of Approved Document M as currently drafted would mean continuing with a recommendation to produce Access Statements when evidence suggests that in some circumstances the access statemtns submitted to building control bodies are of little material benefit in helping to determine whether proposals are compliant.

Failure to take forward amendments proposed in the consultation would leave outdated references in the Approved Document and would miss an opportunity to consolidate guidance that currently resides in FAQ's.

Option 1: 'Revise guidance to support more targeted and risk based compliance'

Following the public consultation the preferred option is to make amendments to Approved Document M which will deliver a more efficient approach. This policy option is assessed against a 'do nothing' baseline.

The starting point for the review of the policy was to consider whether it remains necessary to continue to provide advice on access statements, and if so, what form that guidance should take. Underpinning these considerations is the assumption that a Building Control Body's view of adequate provision will remain constant in relation to a given set of circumstances, though because of the functional nature of the Building Regulations the way in which this is achieved may vary. The overall outcome in terms of what the building control officer deems reasonable provision should therefore remain the same regardless of whether an access statement is provided or not.

Given that this should be the case, we have explored the possibility of removing recommendations and guidance on demonstrating compliance from AD M completely. However, extensive engagement with

external partners (detailed further in the 'Rationale and IA Analysis' section), suggests that Industry as a whole does not favour this approach, noting that there are still significant gaps in skills and awareness where guidance on demonstrating compliance is of benefit.

Available evidence indicates that in larger scale construction projects, developers, designers and Building Control Bodies value and make extensive use of Access Statements to manage communication of compliance. It is therefore anticipated that, even if guidance were to be removed, in both residential and commercial development, schemes above £10m in value would be likely to continue to adopt this approach where it delivers value.

In addition, Industry (particularly service providers) will typically have equality policies requiring the audit of decisions relating to access provision and a proportion will continue to prepare Access Statements with respect to concerns as to public and professional liability. Public bodies are likely to have similar concerns as well as duties under the Equalities Act.

Access Statements will therefore remain a useful tool in certain scales and types of development. However, in smaller scale works which form the majority of notifiable projects (76% of notifiable building work has a value of less than £25,000) where skills and resources are limited, alternative approaches are needed to ease compliance.

The proposed policy does not therefore seek to preclude or prevent the use of Access Statements where applicants believe that a written statement accompanying other information (such as drawings) and as part of an application is the best and most efficient way of agreeing reasonable provision with a Building Control Body.

Alternatives to a written Access Statement will be set out where evidence suggests this would be beneficial. Revised guidance will promote efficiencies in two ways. Firstly by removing reference to prescribed content and structure of third party guidance which sets out a prescriptive list of information that should be required as part of an Access Statement. This will enable applicants and building control bodies to focus on key risks proportionate to the scale and nature of the building work; and secondly by encouraging a wider range of ways to communicate compliance which may be better suited to the skills and resources available to applicants. Combined this should improve communication and eliminate unproductive bureaucracy.

Engagement with Industry also suggests that including this revised approach within the Approved Documents would be necessary to engender behaviour change as Building Control Bodies and applicants would tend to maintain current practice unless given a new sense of direction.

Providing revised guidance will;

- encourage Building Control Bodies and Industry to have confidence in and adopt more efficient, targeted approaches to communicating compliance to ensure that unnecessary or irrelevant information is not required as part of the Building Control application. Communication will therefore become more focused on project critical issues, delivering better outcomes and removing requirements for unnecessary or irrelevant administrative exchanges between applicant and Building Control Body;
- reduce administrative burden whilst focusing available resource on improving quality of compliance as the number of poor quality and ineffective Access Statements produced, particularly for smaller scale work, will be replaced by more effective and lower cost methods of communication.

We recognise that in order to capture these benefits other work is necessary to promote behavioural change. We therefore propose to engage with professional bodies outside the regulatory context to develop revised approaches to guidance and roll-out training to members.

Current practice and anticipated future practice on Access Statements

The Disability Rights Commission has published full guidance on the production of Access Statements[1], and section 8.3 of the sets out the key pieces of information that an access statement should contain, which includes:

- the project sponsor's approach to access with particular reference to the inclusion of disabled people;
- the sources of advice on accessibility and technical issues;
- details of consultations undertaken;
- details of professional advice or audits;
- specific issues affecting accessibility;
- details of management and maintenance policies;
- a plan of the environment including accessible car spaces; and,
- details of instances where good practice cannot or may not be met with implications for users and the information on methods to be used to lessen the impact.

Research and anecdotal evidence suggests that access statements can have a big impact on larger or more complex projects but can involve unnecessary paperwork in the case of smaller projects where they are produced when the guidance is followed to the letter without making it easier to assess compliance with the Building Regulations.

The intention is that in the future only the last bullet point from the list above would need to be covered in a separate access statement, and then only where there was specific deviation from the guidance in Approved Document M. Instead reliance will be placed on drawings, informal engagement with building control and planning access statements, thereby delivering similar levels of access provision without the production of details relating to other issues in the guidance.

Technical updates to AD-M taken forward in response to the consultation

In order to deliver the maximum benefit from amending AD M we are also taking forward a number of minor technical updates that were suggested by respondents to the consultation. A number of respondents identified areas where current guidance within AD M is outdated, either as a result of updated British Standards such as revisions to BS8300 (Code of Practice for the design of Buildings and their approaches to meet the needs of disabled people) on which much of the guidance in AD M is based or because DCLG have clarified guidance through FAQ's on the DCLG website. We are taking forward these limited and minor updates on the basis that they will not materially affect the level of provision, or where updated advice would be best placed in the main AD text. The specific issues are;

1. Update reference to British Standards on toilet seat design (current reference is redundant)

Guidance in AD M currently sets out provisions that WC pans should conform with Bs 5503-03 or BS 5504-04 in order to ensure they are compatible with a variable height toilet seat riser (to equalise height of a wc pan with that of a wheelchair seat to make transfer easier).

These British standards have now been superseded and the reference should be updated to ensure that suitable pans are installed in accessible wc's.

2. Incorporate guidance from British Standard BS 8300 (Design of buildings and their approaches to meet the needs of disabled people) on Light Reflectance Values.

Currently AD M requires a difference in the Light Reflectance Value of critical elements in buildings of a minimum of 30 points. BS8300 requires a minimum value of 20 points having been updated in 2009 on the basis of more recent research.

Aligning these measures will have no negative impact on accessibility (as it will reflect current best practice) but will allow industry greater flexibility in specification of finishes and materials.

3. Incorporate current FAQ on Door opening forces in to main body technical guidance.

AD M currently requires that doors require an opening force of only 20N at the leading edge of the door.

DCLG have also published an FAQ which sets out a higher acceptable opening force at the leading edge (where resistance from door closers and door seals is greatest) which is deemed achievable and has been widely adopted by industry and as also been adopted in the 2009 update of BS8300. This does however regularly cause unnecessary confusion and dispute between designers and building control officer where awareness of the FAQ is low.

4. Update reference to 'cold to touch' handrails in AD m to align with exemption in BS8300

Currently AD M requires that all handrails are not cold to the touch both internally and where associated with the building externally. This provision was based on guidance in British Standard BS8300 when AD M was last updated in 2004, and the requirement is typically met by using special paint coatings or timber or nylon sleeved handrail designs. The 2009 edition of BS8300 amended guidance to recognise that handrails fabricate from metals with a relatively low thermal conductivity, such as stainless steel, are more suitable in locations where low maintenance and/or resistance to vandalism are key factors. It would be sensible to align guidance in ADM with that in the British standard as this would effectively enable greater flexibility of specification in some circumstances.

5. Update guidance on diameter of hand rails.

AD M currently stipulates a handrail dimension of between 40-45mm for circular handrails, and 50mm max for oval handrails. BS8300 allows for a dimension of 32-45mm and we propose to align guidance. We propose that regulatory guidance be aligned with the more flexible British Standard.

Research informing the final-stage Impact Assessment

To inform the evidence base for the proposed changes to Approved Document M regarding Access Statements DCLG commissioned EC Harris, working in conjunction with PRP architects and Adroit Economics, to evaluate how access statements are currently used and to advise on the costs and benefits of the amendments to Approved Document M proposed in the consultation document. DCLG made reference to this piece of work in the consultation-stage impact assessment.

The final report from this research project has been used to inform this impact assessment and as such there have been some fairly substantial changes to the estimated costs and benefits presented at consultation stage. These estimates are considered to be considerably more robust than those presented at consultation stage. The overall impact of the policy, a net benefit to business and a regulatory 'out', remains the same although the revised estimate of the magnitude of this impact is now smaller. Primarily, this is the result of findings from the fieldwork undertaken that access statements are being used less in practice than was previously thought to be the case. This corroborates comments made by a number of respondents to the consultation who questioned whether 50% of projects in the £25,000-£500,000 value band and 100% of projects in the £500,000-£2,000,000 value band would produce access statements and suggested lower assumptions would be more appropriate.

The key fieldwork elements of the research, upon which the assumptions made in this impact assessment are based, included:

- A web based survey of building control bodies. This recorded basic details of 1,333 building control applications and whether they were accompanied by an access statement
- A survey of 18 volunteer Building Control officers exploring their views of access statements.
- A case study review of 128 access statements by PRP architects against a standard proforma in order to record a number of details about each statement and, perhaps more importantly, to assess the impact of the access statement on the resulting design

The research highlighted that access statements are only rarely received in practice; less than recommended and less than estimated for the consultation stage IA. Whilst this does reduce the monetary deregulatory benefit of the proposal, it also provides evidence that the current approach is working differently in theory than in practice. The key findings included:

- only 2.7% of applications to building control were accompanied by an access statement (despite being recommended in 33% of cases)
- the quality of access statements varied strongly with the size of the project

- for many smaller projects access statements tended to be used explicitly to justify deviation from the requirements of approved document M (confirmed via the qualitative survey)
- more than 50% of access statements were adjudged to have no or marginal benefits in assisting building control bodies to determine whether solutions were compliant.
- access statements are most commonly produced by architects

Costs and benefits of the policy

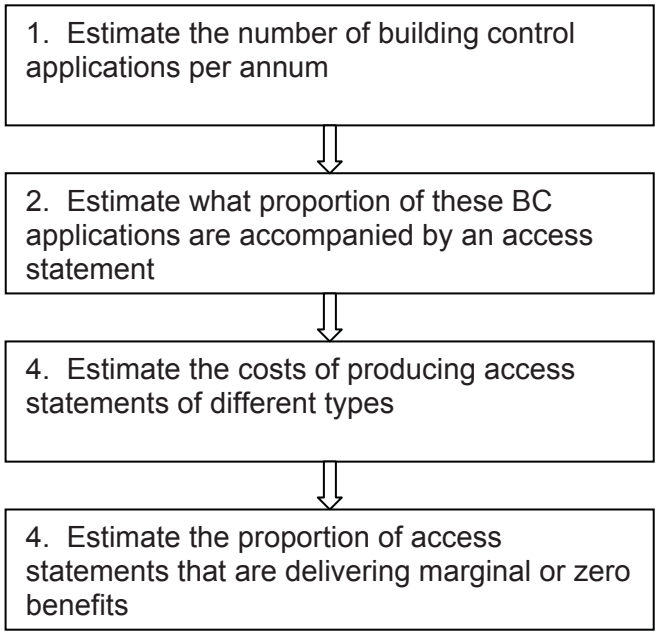
The estimated costs and benefits of the policy have been revised significantly from those presented at consultation stage on the basis of the additional research which found that access statements were being used less in practice than assumed for the consultation.

Benefits

The benefits of amending Approved Document M (to remove the recommendation to produce an access statement) result from the time savings. In particular, by removing the recommendation, it is felt that access statements which were not generating a benefit will no longer be produced in future. By removing those access statements with the least impact the benefits of inclusive provision can be retained but at a lower cost.

In order to estimate the benefits of the changes a simple calculation structure is used. The detailed calculations are available in the Appendix A of the EC Harris report but the overarching principles are restated here. The flow diagram illustrates the four steps in the process.

Fig. 1 – The impact assessment calculation structure



At consultation stage we assumed that there would be 300,000 applications to building control bodies per annum, covering both newbuild and refurbishment projects, based on a conservative extrapolation of results from the 2008 Survey of Building Control[12].

This impact assessment presents three scenarios for the benefits delivered by the policy (low/central/high). Primarily this is due to the fact that the number of applications to building control that

[1] http://www.communities.gov.uk/publications/planningandbuilding/surveybuildingcontrolrpt

[2] Since the consultation the Building Control Alliance have published a new piece of research on Compliance Actions carried out by building control bodies which found that 200,000 projects were visited or inspected in one working month, suggesting that the total number of applications to building control bodies in a whole year could be greater than 300,000. It remains a suitable assumption for the 'low' scenario in this impact assessment. http://www.buildingcontrolalliance.org/wp-content/uploads/2012/03/BCA-Compliance-Actions-Research-from-LABC-ACAI-14-March-2012.pdf

are accompanied by access statements is uncertain and only incomplete data is available to make a suitable estimate. The three scenarios considered here are:

1) 8,000 access statements per annum
2) 10,000 access statements per annum
3) 20,000 access statements per annum

The first scenario is based on the results of the logging exercise conducted by EC Harris. This suggested that 7% of applications to building control were in respect of new building (the remainder being extensions or refurbishment) and that 4% of new-build applications and 2.6% of refurbishment applications were accompanied by access statements. Assuming 300,000 building control applications per year gives an estimate of 8,000 access statements per annum. The second and third scenarios assume that only construction works with a value above £25,000 submit access statements (of which there are approximately 100,000. The proportion of these submitting access statements in scenario 2 (3) is assumed to be 10% (20%) on the basis of the mean (median) average of a DCLG web survey of building control[3].

Based on the PRP review of access statements 33% of newbuild access statements are detailed and 67% are simple. For refurbishment or extension applications 5% are detailed and 95% are simple. The cost of producing different types of access statement are calculated based on estimates of the length of time it takes to produce the statement, for building control to review the statement and to consult on the statement if necessary. This marks another refinement from the estimates presented in the consultation stage IA which included only the costs to the firm preparing the access statement. However, any increase in the estimated costs arising from including these additional stages in the process is dominated in terms of overall impact by lower number of access statements that are assumed here.

Table 1 – Time required to prepare, review and consult on access statements

Stage	*Type*	*Complex Access Statements(hrs)*	*Simple Access Statements (hrs)*
Preparation	New Builds	39	3
	Refurbishments	21	2
Building control review	New Builds	7	2
	Refurbishments	2	1
Consultation	New Builds	3	2
	Refurbishments	2	1

Source: PRP Architects

The preparation of access statements is assumed to be performed by architects hour and for the other stages by building control professionals. Estimates of hourly costs are based on two sources, the EC Harris database of professional fees and the Annual Survey of Hours and Earnings[4]. Hourly rates have been calculated for the central case by attaching a 50% weighting to wage rates from the EC Harris professional fees database and a 50% weight to wage rates derived from the Annual Survey of Hours and Earnings[5].

The EC Harris database has been used as a source of evidence on the cost for workers in the construction industry. This reflects the value by the market of a professional including wage, on costs and other business costs to the organisation. This approach is widely used in the construction industry. However, there is a risk that this may overstate the cost savings. For instance in some situations, the

[3] An assumption of 10,000 access statements per annum, derived from the results of the web survey of building control, produces very similar results to an assumption of 350,000 applications to building control allied with the results of the EC Harris logging exercise (4%/2.6% of building control applications accompanied by an access statement). This strengthens the case for using 10,000 access statements per annum as the central case scenario.

[4] ONS, ASHE, 2012, http://www.ons.gov.uk/ons/rel/ashe/annual-survey-of-hours-and-earnings/ashe-results-2011/ashe-statistical-bulletin-2011.htm

[5] Estimates from the ASHE have been up-rated by 30% to allow for pensions, national insurance contributions and other variable costs of labour employment (see Standard Cost Model, BERR, 2005, http://www.berr.gov.uk/files/file44503.pdf)

saving may result in the professional being employed for fewer hours and delivering less than the full business cost savings assumed in the charge out rates. We have therefore also used the Standard Cost Model to estimate costs based upon the Annual Survey of Hours and Earnings (ASHE) plus an additional estimate of 30% for additional overheads such as pension contributions and national insurance contributions. It is our assessment that this approach underestimates typical benefits of time for professionals in the construction industry.

So for our central estimate we have assumed an hourly rate half way between the EC Harris industry estimate and the ASHE plus 30% approach. We feel this estimate reasonably reflects that some time savings of key professionals have a high value reflected in the charge out rate for carrying out other priorities while in other situations the business cost saving might be more constrained.

In the low scenario hourly rates are based on the Annual Survey of Hours and Earnings and for the high scenario hourly wage rates have been based on the EC Harris professional fees database.

As an example table 2 shows how the cost of producing detailed access statements in relation to newbuild. Similar calculations are performed in each scenario for refurbishment applications and for both simple and detailed access statements.

Table 2 – Cost of producing access statements: illustrative calculations

Number of building control applications – p.a.	300,000
of which newbuild	7%
of which accompanied by access statement	4%
of which are detailed access statements	33%
Number of detailed newbuild access statements	277.2
Hours taken to produce detailed statement	39
Cost per hour	£51
Total cost	£ 291,892

To estimate the proportion of access statements submitted that deliver no benefits, or only marginal benefits, the results of the access statement review conducted by PRP architects is relevant. Based on this review it is assumed that 60% of simple access statements would deliver marginal or zero benefits in the absence of the policy change. The results of applying the methodology above are shown in Tables 3-5. The current policy on Access Statements is estimated to cost £27m over 10 years and the revised policy £18m.

Table 3 – Ongoing costs of existing access statements policy

Costs of current Access Statement Arrangements	**Scenario 1** **8,000 p.a.**	**Scenario 2** **10,000 p.a.**	**Scenario 3** **20,000 p.a.**
Value of time to prepare Access Statement	£ 915,260	£ 2,135,932	£ 6,282,153
Value of time to review Access Statement	£ 267,068	£ 567,527	£ 1,583,795
Value of time to consult on Access Statement	£ 195,604	£ 415,664	£ 1,159,993
Total Annual Cost	**£ 1,377,931**	**£ 3,119,123**	**£ 9,025,941**
10 year PV	£ 11,860,796	£ 26,848,432	£ 77,692,474

Table 4 – Ongoing costs of the revised policy on access statements

Costs of revised Access Statement arrangements	**Scenario 1** **8,000 p.a.**	**Scenario 2** **10,000 p.a.**	**Scenario 3** **20,000 p.a.**
Value of time to prepare Access Statement	£ 664,629	£ 1,551,039	£ 4,561,879
Value of time to review Access Statement	£ 146,814	£ 311,984	£ 870,654
Value of time to consult on Access Statement	£ 102,353	£ 217,502	£ 606,983
Total Annual Cost	**£ 913,796**	**£ 2,080,525**	**£ 6,039,516**
10 year PV	£ 7,865,668	£ 17,908,511	£ 51,986,260

Table 5 – Summary table of benefits from revised policy on access statements and updates to the technical provisions

Benefits from revising guidance on Access	**Scenario 1**	**Scenario 2**	**Scenario 3**

Statements	8,000 p.a.	10,000 p.a.	20,000 p.a.
Time saving (preparing Access Statements)	£ 250,630	£ 584,893	£ 1,720,274
Time saving (reviewing Access Statements)	£ 120,254	£ 255,542	£ 713,142
Time saving (consulting on Access Statements)	£ 93,251	£ 198,162	£ 553,010
Total Annual Benefit of revised guidance on access statements	£ 464,135	£ 1,038,597	£ 2,986,426
10 Year PV Benefits	£ 3,995,128	£ 8,939,921	£ 25,706,214

Source for Tables 3-5: Adroit Economics, DCLG calculations

Updates to the Technical Provisions

Consultation responses suggested a number of areas where AD-M could be amended, simplified or clarified in a new Approved Document M. EC Harris, built asset consultants, estimated the potential savings from taking forward various simplification measures related to AD-M. Findings from this research found that for the majority of the potential simplification measures neither a cost nor a benefit would result. However, the research did suggest that savings would be achieved by removing the requirement for handrails to be 'not cold to the touch' in certain areas.

1. Update reference to British Standards on toilet seat design (current reference is redundant): **no cost impact**

2. Incorporate guidance from British Standard BS 8300 (Design of buildings and their approaches to meet the needs of disabled people) on Light Reflectance Values: **no cost impact**

3. Incorporate current FAQ on Door opening forces in to main body technical guidance: **no cost impact**

4. Update guidance on diameter of hand rails: **no cost impact**

5. Update reference to 'cold to touch' handrails in AD m to align with exemption in BS8300: **£1.6m per year (outlined below)**

Currently the British Standard allows for handrails in areas likely to be subject to vandalism to be exempt from the requirement to avoid being cold to touch. AD M does not permit this consideration and it would be sensible to align guidance in ADM with that in the British standard as this would effectively enable greater flexibility of specification in some circumstances.

AD M currently stipulates a handrail dimension of between 40-45mm for circular handrails, and 50mm max for oval handrails. BS8300 allows for a dimension of 32-45mm and we propose to align guidance. We propose that regulatory guidance be aligned with the more flexible British Standard.

The report estimates that for buildings where the savings are achievable (i.e. because they have stair and toilet facilities which would be covered by the provisions of ADM) the measure will save £250 for each small office or retail building, £350 for large retail buildings, £600 for medium offices and £650 for large offices. This savings results from not having to use specialized paint coatings on surfaces subject to the requirements (primarily handrails but also door handles).

There is uncertainty over what proportion of projects in each category would achieve the savings, for which estimates were made by PRP architects and EC Harris in their report, and also over the number of new developments of each type built per year.

As a cyclical industry, construction output varies significantly year-to-year (investment in commercial offices was over £12billion in 2007 and just £3.3billion in 2009), so there is a wide margin of uncertainty over development rates for the appraisal period. Three core scenarios are therefore analysed, based on the estimated stock of existing buildings[6] and assumed building lifetimes of 40/60/80 years for commercial buildings, 50/75/100 for large retail units and 60/120/180 for small retail units. The retail unit

[6] Non-domestic buildings data is available in the datasheets accompanying the 2007 Energy Performance of Buildings Directive Regulatory Impact Assessment, available at: http://www.communities.gov.uk/archived/publications/planningandbuilding/regulatoryimpactenergyperformanc

asset life lengths have been increased since a significant proportion of the existing stock of retail units is contained in city centres and historic buildings and therefore is less likely to be replaced to a typical timeframe as might be expected of out-of-town and warehouse style developments. The build rate assumptions are set out as percentages in table 6 and the absolute number is shown in table 7.

Table 6 – Build rate assumptions

Building type	Stock of existing non-domestic buildings	Build rate - low	Build rate - central	Build rate - high
Small commercial office (<250 m^2)	201,113	1.25%	1.67%	2.50%
Med. commercial office (250-1000m^2)	40,613	1.25%	1.67%	2.50%
Large commercial office (1000m^{2+})	9,268	1.25%	1.67%	2.50%
Small retail (<100 m^2)	354,918	0.56%	0.83%	1.67%
Large retail (>100 m^2)	167,494	1.00%	1.33%	2.00%

To validate these assumptions several further sources have been considered. Adroit Economics analysis of the ONS construction statistics suggests in the order of 3600 new commercial units per year[7]. Work performed to accompany the regulatory impact assessment for the Energy Performance of Buildings Directive estimated 1500 new commercial offices and 3200 new retail developments per year. Furthermore, planning statistics collected by DCLG suggest 3,387 major and minor office developments in the year to March 2011 and 8,574 retail, distribution and servicing units. These three sources help to confirm that the estimates presented below are a reasonable representation of construction rates for the different building typologies, particularly given the volatility of investment and construction over time. The central scenario is reasonably cautious, which is appropriate for quantifying the impact of a regulatory 'OUT'.

Table 7 – Assumed annual build rates for commercial and retail developments

Build rate	Scenario 1	Scenario 2	Scenario 3
Small commercial offices	1900	2400	3200
Medium commercial offices	500	600	1000
Large commercial offices	100	150	200
Small retail	1900	2800	5600
Large retail	1500	2100	3100

Source: EC Harris, Adroit Economics, DCLG Calculations

Table 8 – Applicability assumptions for commercial and retail developments

Applicability	Scenario 1	Scenario 2	Scenario 3
Small commercial offices	30%	66%	80%
Medium commercial offices	30%	66%	80%
Large commercial offices	70%	90%	100%
Small retail	30%	50%	70%
Large retail	60%	100%	100%

Source: EC Harris, PRP architects, Adroit Economics

Table 9 – Benefits of updates to the technical provisions

Benefits of revised guidance	Scenario 1	Scenario 2	Scenario 3
Cost saving per annum	£ 593,000	£ 1,596,350	£ 2,895,000
10 year NPV	**£ 5,104,358**	**£13,740,880**	**£24,919,252**

Source: EC Harris. Adroit Economics, DCLG Calculations

[7] Adroit Economics: CBA of Proposed Changes to Lighting Diffusers, available at [WEBLINK]. ONS construction statistics are available at: http://www.ons.gov.uk/ons/taxonomy/search/index.html?newquery=*&nscl=Building+and+Construction&nscl-orig=Building+and+Construction&content-type=publicationContentTypes&sortDirection=DESCENDING&sortBy=pubdate

In the central case scenario the benefits of the revised policy on access statements are estimated to be £1.0m per year. The updates to the technical provisions deliver a further benefit of £1.6m per year, a total annual benefit of £2.6m per year as shown in table 10.

Table 10 - Summary table of Benefits

	Scenario 1	Scenario 2	Scenario 3
Annual Savings from Access Statements	£ 464,135	£ 1,038,597	£ 2,986,426
Annual savings from technical provisions	£ 593,000	£ 1,596,350	£ 2,895,000
Total Annual Savings	**£ 1,057,135**	**£ 2,634,947**	**£ 5,881,426**
10 year NPV Access Statements	£ 3,995,128	£ 8,939,921	£25,706,214
10 year NPV technical provisions	£ 5,104,358	£13,740,880	£24,919,252
10 year NPV	**£ 9,099,486**	**£22,680,802**	**£50,625,467**

Non-Monetised Benefits

There may be some non-monetised benefits of the policy in addition to those monetised above. The monetised benefits only cover the reduction in administrative costs and this does not include the potential spill-over benefits on the whole process of building control. In particular these proposals should help to reduce the costs of enforcement and minimise disruption. Ensuring that access has been suitably thought through *before* building work progresses is more cost effective than making alterations later and the savings from improving the process will be shared between builders and building control bodies.

Current practice means that Access Statements actually make the job of building control body more difficult as deviations from guidance are buried within text on a variety of issues. In the future builders and designers will instead engage with building control to agree access provision without the submission of an access statement, speeding up the process of identifying issues and rectifying them. Because issues will be identified more quickly, costs of enforcement and of rectifying non-compliant work could be reduced.

However, there is no evidence or data available to identify the value of the costs which might be avoided as a result of the policy. Although anecdotal evidence is available to indicate that such costs do arise and can be extremely significant when they do, recovering formal evidence on these figures would require a substantial piece of research which appears disproportionate to take forward a deregulatory measure.

Respondents to the consultation could not provide evidence on the magnitude of these benefits, although there were references to the potential benefits amongst the written comments. For example, one noted the 'significant cost-savings to be gained from the promotion of systematic early participation by Building Control and Construction bodies in the development of a single, proportionate and evolving access strategy'.

Costs

The policy changes do not affect what constitutes reasonable provision in relation to any specific element of building work; that decision will continue to be made by the relevant Building Control Body and should remain constant. As a result, annual costs to industry should not rise as there is no material change in the level of provision they would be asked to provide. The costs to industry therefore relate solely to the costs of familiarising themselves with the changes and embedding them in ongoing working practice. Adroit Economics have estimated these transition costs by considering three potential costs to professionals working in the area:

- Time to read new guidance (15 minutes per professional)
- Time to amend in-house approaches (2.5%-5% of staff required to revise their firm's approach to access statements and other aspects of Approved Document M, thought to take 8 hours)
- Time to attend training (up to 25-45% of staff depending on profession could be required to attend 30 minute training sessions on the changes).

The costs will fall on 4,500 building control officers[8], 32,000 architects, 25,000 surveyors and 2,000 other professionals, leading to a total estimated year one transitional cost of £3 million as shown in table 6.

Hourly rates have been calculated for the central case by attaching a 50% weighting to wage rates from the EC Harris professional fees database and a 50% weight to wage rates calculated from the Annual Survey of Hours and Earnings[9]. These sources represent slightly different sources for calculating the cost of worker time but both are relevant. Where work is undertaken by an outside expert and bought in to perform a role by the firm the charge out rates most accurately reflect the cost to the business of extra burdens. Where a cost involves marginally more time expended by an existing employee an approach based on ASHE might be appropriate. Since both cases may be relevant as regards access statements a 50% weighting has been attached to both sources in the central case.

Table 11 – Transitional Costs

Time to read new guidance

Profession	Number of Persons	% involved	No. involved	Hourly Fee	@ 15 min	Total Cost
Building Control Officer	4,500	80%	4,000	£43	£11	£38,250
Achitects	32,000	80%	25,600	£51	£13	£326,400
Surveyor	25,000	80%	20,000	£43	£11	£212,500
Other	2,000	80%	1,600	£43	£11	£17,000
					Total	£594,150

Time to amend in-house approaches

Profession	Number of Persons	% involved	No. involved	Hourly Fee	@ 8 hours	Total Cost
Building Control Officer	4,500	5.0%	250	£43	£340	£76,500
Achitects	32,000	5.0%	1,600	£51	£408	£652,800
Surveyor	25,000	2.5%	625	£43	£340	£212,500
Other	2,000	2.5%	50	£43	£340	£17,000
					Total	£958,800

Time to undertake training in new approaches

Profession	Number of Persons	% involved	No. involved	Hourly Fee	@30 min	Total Cost
Building Control Officer	4,500	45.0%	2,250	£43	£21	£43,031
Achitects	32,000	45.0%	14,400	£51	£26	£367,200
Surveyor	25,000	22.5%	5,625	£43	£21	£119,531
Other	2,000	22.5%	450	£43	£21	£9,563
					Total	£539,325
					Total transition cost	**£2,092,275**

Source: Adroit Economics

To extend this analysis we have conducted sensitivity testing on the familiarisation time and the proportion of professionals required to read the new guidance as these are the more uncertain assumptions in the analysis. We have also conducted the sensitivity analysis using an approach based on ASHE in the low scenario and using the EC Harris fees database for the high scenario. In the low scenario we have assumed that only 60% of professionals read the new guidance and assumed that 2.5% of *all* professionals are involved in amending in-house approaches to the guidance, giving a one-off cost of £0.9m. In the high scenario we have assumed that professionals spend 30 minutes reading the

[8] At consultation stage it was assumed that there are 4000 building control officers nationally, extrapolated from the survey of building control. A more recent submission of information from LABC provides more definitive evidence that there are 3,500 building control officers in England and Wales (with, perhaps, 3,300 in England). There is more uncertainty about the number of approved inspectors. The 2008 survey of building control recorded 1,200 technical staff members whilst a recent submission of evidence from the CIC estimated 700 qualified professionals. This could be an underestimate since there will also be part-qualified and unqualified staff performing roles in inspections. 4,500 is therefore a revised best estimate of the number of building control officers.

[9] ASHE, ONS, 2012, http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-235202

new guidance rather than 15 and that 5% of *all* professionals are involved in amending in house approaches to give a one-off cost of £4.2m. Full tables are presented in Annex B.

Summary table of costs and benefits

The summary table of costs and benefits shows a **net present benefit** over ten years of approximately **£20.6m** in Scenario 2. This is shown in the summary sheet of the impact assessment.

Table 12 – Summary table of costs and benefits

Costs and benefits from revising guidance on Access Statements	Scenario 1	Scenario 2	Scenario 3
	8,000 p.a.	10,000 p.a.	20,000 p.a.
One Off Transition Costs - Year 1	£ 873,675	£ 2,092,275	£ 4,215,000
Annual savings from Access Statements	£ 464,135	£ 1,038,597	£ 2,986,426
Updates to the technical provisions	£ 593,000	£ 1,596,350	£ 2,895,000
Total Annual Savings	**£ 1,057,135**	**£ 2,634,947**	**£ 5,881,426**
10 year NPV	£ 8,225,811	£ 20,588,527	£ 46,410,467

Source: Adroit Economics, DCLG calculations

Comparison with consultation-stage estimates

At consultation stage estimates were presented that suggested an annual benefit of £18.8m and a NPV of £159.35m over 10 years. The savings on Access Statements presented here therefore represent less than 10% of the level originally estimated. This stems from the fact that the additional research work has discovered that access statements are used less in practice than was originally believed to be the case. Therefore, the amount of work avoided through these changes is lower than previously estimated.

The finding that only 2.7% of applications to building control in the sample were accompanied by an access statement confirms an issue raised by several respondents to the consultation, who suggested that the number of projects submitting access statements in practice was lower than estimated in the consultation stage impact assessment. The central case in this impact assessment assumes 10,000 access statements per annum, in contrast to the consultation stage impact assessment which assumed that circa 40,000 access statements per annum are produced. These concerns have therefore been addressed.

The consultation identified a number of technical provisions of Approved Document M which could be clarified when making amendments to the document. Based on research by EC Harris in 2011 the majority of these technical amendments are estimated to have no cost impact but there is thought to be a cost saving from removing the requirement for handrails and handles to be 'not cold-to-the-touch' and this cost saving contributes about half of the value of the policy.

Direct costs and benefits to business (One In One Out)

The direct benefits to business from the policy are the annual savings for no longer preparing access statements reported in table 5 and assuming that 25% of the costs of reviewing access statements falls on private sector building control bodies (approved inspectors) rather than on local authority building control bodies[10]. The direct costs to business of the policy are the transitional costs in table 6, other than those falling on public building control bodies. According to OIOO methodology the direct costs and benefits should be reported on an 'annual equivalent' basis in 2009 prices for standardised comparison across policies. Prices in this impact assessment are 2012 values and have therefore been adjusted using a factor of 0.927 to express them in terms of 2009 prices. The annual equivalent net benefit to business from this policy is estimated to be £2.0 million (in 2009 prices)[11]. This figure appears in the summary sheets of the impact assessment.

Table 13 – Direct costs and benefits to business

[10] This roughly corresponds to our understanding of the size of the two building control routes, see http://www.communities.gov.uk/publications/planningandbuilding/surveybuildingcontrolrpt

[11] Figures have been converted throughout into 2009 prices using a GDP deflator of 0.927, see: http://www.hm-treasury.gov.uk/data_gdp_index.htm.

Direct costs to business	Scenario 2
Direct costs to business (transition costs) (£2012)	£ 2,092,275
Direct annual benefits to business (£2012)	£ 2,443,291
Present benefit (10 yr NPV) (£2012)	£ 21,031,080
Net present benefit to business (10 yr NPV) (£2012)	£ 18,938,805
AE Cost (£2012)	-£ 243,071
AE Benefit (£2012)	£ 2,443,291
Annual Equivalent Net Benefit to Business (£2012)	£ 2,200,220
AE Cost (£2009)	-£ 225,326
AE Benefit (£2009)	£ 2,264,930
Annual Equivalent Net Benefit to Business (£2009)	£ 2,039,604

Source: Adroit Economics, DCLG calculations

Direct costs and benefits to housebuilders

In the 2010 Comprehensive Spending Review[12] the Government also committed to reduce the total regulatory burden on the house building industry over the Spending Review period (which runs to March 2015). Like the One In One Out rule, this means that any new regulation must be **at least** matched by deregulatory measures of the same value.

One of the findings of the research report was that overall **16%** of access statements were produced for residential projects, most of which will be of the simple type and will therefore no longer be recommended in the revised approach to access statements. The estimated direct costs and benefits to homebuilders have therefore estimated as 16% of the direct costs and benefits to business arising from the revised guidance on access statements. The benefits of the consolidation and update exercise are assumed not to fall to homebuilders. This suggests an annual equivalent net benefit to homebuilders of £0.1 million (in 2009 prices) as a result of these changes.

Table 14 – Direct costs and benefits to housebuilders

Direct costs to housebuilders	Scenario 2
Direct costs to business (transition costs) (£2012)	£ 334,764
Direct annual benefits to business (£2012)	£ 135,511
Net present benefit to business (10 yr NPV) (£2012)	£ 831,668
Annual Equivalent Net Benefit to Business (£2009)	£ 96,619

Source: Adroit Economics, DCLG calculations

Benefits to home builders are likely to reflect the broader benefits derived from the proposed change in approach, namely that fewer poor quality access statements will be submitted (research by EC Harris suggests at least half of access statements submitted are of no material use in demonstrating compliance), and where statements are provided these will contain only that information needed to assess compliance of technical approaches which sit outside the guidance in AD M, rather than setting out how compliance has been achieved universally. In essence, there will be fewer access statements, and those that are submitted will be more concise. Potentially, this benefit seems more likely to accrue to smaller firms engaged in house building rather than national developers who apply very similar approaches across larger numbers of new dwellings. This corresponds to the one respondent to the consultation who mentioned this point, a building control officer who suggested that 'For volume housebuilders an access statements submitted are likely to be relatively repetitive requiring minimal alteration for each project. The cost savings might therefore be minimal'.

[12] http://cdn.hm-treasury.gov.uk/sr2010_completereport.pdf paragraph 2.31

Risks and assumptions

The assumptions used in arriving at the costs of pursuing Option 2 are dealt with in turn in the preceding paragraphs and have been updated in line with the research completed by EC Harris and by the result of consultation, which has given the figures an additional level of rigour.

Future commercial and retail build rates and the applicability of savings on cold-to-touch handrails are uncertain and have been explored through ranges based on estimates from the consultant team.

We have also benefited from responses to our consultation seeking industry and public views on both the proposals and the evidence base of costs, benefits and impacts. 67% of respondents supported the revised approach, but there was some concern that both the frequency with which access statements are submitted and the cost of preparing access statements were high. This aligns well with the findings from research work completed by EC Harris and the findings of this work are reflected in this revised final Impact assessment.

The most significant risk associated with the measures set out in the Impact Assessment remains that the proposed approach will be less effective in ensuring reasonable provision for access to and use of buildings than the existing policy. However, the subjective analysis of access statements undertaken by EC Harris supports our view that a reduced quality of outcomes would be unlikely. Where Access Statements currently deliver good value, typically in larger or more complex schemes, they will continue to be used and revised guidance will continue to support this. But many of the access statements that are submitted and are not of material use in either assessing compliance or in ensuring that reasonable provision for access is made, and we believe there is therefore merit in suggesting alternative approaches to ensure that this is achieved.

"Whilst 67% of consultation responses were supportive of the proposed revisions to guidance on submitting Access Statements, some concerns were expressed those who did not support the proposals that the Consultation Stage Impact Assessment did not take into account costs to industry arising from the need to make Reasonable Adjustments to the physical features of properties where claims are made under the terms of the Equality Act. This was based on a view that the revised approach to demonstrating compliance would result in less accessible buildings and building work. We do not agree that this is likely to be the case. The net overall effect of this policy will be to reduce the cost of compliance by focusing on more complex aspects of access provision without reducing the resultant accessibility of buildings. Of those responding ‘no’ to the question under discussion only two provided verbatim comments to explain the answer and neither discussed the potential scale of benefits.

Building Control Bodies who responded to the consultation were strongly supportive of the revised approach (85% of those with a view were in favour), precisely because they typically believed it would make the task of ensuring reasonable provision easier. We have not therefore sought to assess the costs to industry of subsequent reasonable adjustments, as we do not believe that this policy will materially impact on the frequency or cost of such adjustments in reality.

We do recognise that there is a need to explore the cost and nature of reasonable adjustments required of building owners and businesses, in order to understand whether the current guidance in AD M adequately reflects the needs of disabled people. A part of our proposed longer term review considering whether guidance in AD M continue to be fit for purpose we will seek to identify or quantify the cost of reasonable adjustments so that they can be properly accounted for in future Impact Assessments.

Wider Impacts

The wider impacts of simplifying the guidance surrounding the use and application of Access Statements and clarifying the relationship between AD M and the Equality Act have been considered through a series of specific impact tests.

Equalities Impact Test

An initial equalities screening of the proposed policy was carried out and determined that a full equalities impact test was required due to the sensitivity of issues surrounding this policy. The Full Equalities Impact Assessment confirmed that whilst a number of the equality groups could be directly affected by this policy it is considered unlikely that there will be any negative impacts overall in terms of the level of provision in the completed building work. This is supported by the findings of research completed since

the consultation was launched . This consultation stage Equality Impact assessment was published alongside the consultation stage impact assessment. We have reviewed and updated the Equalities Impact Assessment in the light of both consultation responses and more recent research and it is published alongside this final Impact Assessment.

SME's Impact Test/ Micro Business etc

The potential effects of simplifying guidance in Approved Document M on competition and small firms have been assessed as creating no negative impact. Access consultants are unlikely to lose work as they are typically employed for larger scale projects where Access Statements are valued and utilised to good effect. Access Statements for smaller scale works are typically written by non-specialists who will benefit from the streamlining of guidance which encourages alternative means of demonstrating compliance through the reduction in administrative demand placed upon them. Developers and designers will have greater flexibility in deciding how they wish to approach demonstrating compliance and will most likely see reduced costs as a result.

Competition Impact

The proposed policy seeks to establish a more effective process affecting one part of the Building Regulations. As such it does not make any significant change to how the UK market will operate. The policy will not limit the number or range of suppliers, limit the ability of suppliers to compete or reduce suppliers' incentives to compete vigorously. As a deregulatory measure the intention is to reduce costs for builders and developers; if there is an impact on competition at all it should be positive.

Environmental Impact Tests

It has been determined that this policy will not result in additional greenhouse gasses being emitted and will have no impact on the wider environment.

Social Impact Tests

We do not expect the proposal to have any social implications.

Sustainable Development

We do not expect the proposal to have any sustainable development implications.

Summary and preferred option with description of implementation plan

The proposed policy is to revise guidance setting out a more flexible, targeted and risk based approach to demonstrating compliance between applicants and Building Control Bodies which better reflects the resources and skills available in varying types and scales of building work. We will also update minor technical references where this eases compliance for industry.

Because Part M (Access to and use of buildings) deals with aspects of layout and provision, it is important in minimising the cost of compliance and in ensuring that building work is suitably accessible, that clear agreement as to what constitutes reasonable provision should be reached prior to commencing the building work itself.

We therefore feel that merit remains in providing guidance to both applicants and building control bodies as to the benefits of ensuring that this is the case. However, the available evidence suggests that imposing a 'one size fits all' approach focused on the provision of Access Statements is not the best way of achieving desired outcomes.

We propose;

- To simplify guidance on communicating compliance, making clear that Access Statements are not a requirement of building control applications and placing the onus on applicants and building control bodies to decide on the most efficient and suitable way of establishing a joint view of reasonable provision.
- To support implementation of this approach to establish a dialogue between Government and professional bodies (such as Architects, Access Consultants, Engineers, Building Control Bodies

and Surveyors) to encourage them to lead in considering how access issues can be best addressed during the design and construction process.

Implementation Plan

The simplification of guidance surrounding the use of Access Statements was formally consulted upon in December 2011, with a view to changes coming into force in April 2013. These changes will be made in parallel with a process of engagement with professional bodies to explore how they can raise the profile, awareness and skills amongst their members in order to capture the benefits of this approach, limiting transitional costs, whilst continuing to give appropriate consideration to the needs of a broad range of building users.

Annex A: Analysis of Consultation Responses

Annex B: Full Equality Impact Assessment

Annex C: E C Harris Research, November 2010, 'Building Regulations Review, Part M: Access Statements'

Annex A – Results of Public Consultation

The consultation stage impact assessment identified a need to test the assumptions through the consultation. *The estimated benefits have been reduced significantly based on the findings of the additional research but the comments relate to the estimates in the consultation stage IA.*

The time and cost to Industry in becoming familiar with revised guidance within Approved Document M. 74% of consultation respondents agreed and 24% disagreed with the figures for transitional costs used in the Impact Assessment. We have revised the transitional costs based on the more detailed work carried out by EC Harris and Adroit Economics.

The percentage of building control applications currently accompanied by an Access Statement, banded by project size. 24 respondents answered this question with 83% supporting the figures used within the Impact Assessment and 17% disagreeing. Where additional comments were provided they largely suggested that the number of applications accompanied by an access statement appeared high, and this has been taken on board in the revised figures as the research project suggested a lower number of access statements per annum than was assumed in the consultation papers.

The extent to which revised guidance will deliver benefits to industry.20 respondents responded with 60% agreeing and 40% disagreeing with the benefits set out in the Impact Assessment. None of the respondents who disagreed with the estimates identified exactly which assumptions they disagreed although did suggest the estimated benefits appeared high. No additional evidence was provided. However, following the additional research the estimated benefits are now significantly lower so this concern has been addressed.

The extent to which revised guidance will impact on compliance. 33% of respondents disagreed with the proposed revised approach and of these a majority provided further comment suggesting that it could lead to lower levels of compliance. However, this was offset more that 2 to 1 by respondents who thought this approach would improve compliance by focusing on areas of divergence from the guidance in the Approved Documents.

Whether there are any costs not identified within the consultation stage Impact Assessment. 80% of consultation respondents responded that they did not have any evidence of further costs, whilst 20% thought that other costs remained to be identified, in once case specifically identifying post completion alterations as an area not explored in the Impact Assessment. No actual evidence was submitted.

We also stated that we would explore the extent to which revised guidance will change industry behaviour and to what extent this will be effective. This has been more difficult to draw out from consultation responses. However, the majority of respondents who supported the revised approach were architects and building control officers or organisations representing building control officers. EC Harris research suggests that architects remain responsible for the majority of access statements prepared and submitted, and given the overwhelming support from building control professionals we have a high degree of confidence that the measures as set out will be effective.

Annex B – Transition Costs

Low scenario transition costs

Time to read new guidance

Profession	Number of Persons	% involved	No. involved	Hourly Fee	@ 15 min	Total Cost
Building Control Officer	4,500	60%	4,000	£25	£6.25	£16,875
Achitects	32,000	60%	25,600	£27	£6.75	£129,600
Surveyor	25,000	60%	20,000	£25	£6.25	£93,750
Other	2,000	60%	1,600	£25	£6.25	£7,500
					Total	£247,725

Time to amend in-house approaches

Profession	Number of Persons	% involved	No. involved	Hourly Fee	@ 8 hours	Total Cost
Building Control Officer	4,500	2.50%	113	£25	£200	£22,500
Achitects	32,000	2.50%	800	£27	£216	£172,800
Surveyor	25,000	2.50%	625	£25	£200	£125,000
Other	2,000	2.50%	50	£25	£200	£10,000
					Total	£330,300

Time to undertake training in new approaches

Profession	Number of Persons	% involved	No. involved	Hourly Fee	@30 min	Total Cost
Building Control Officer	4,500	45.0%	2,250	£25	£12.5	£25,313
Achitects	32,000	45.0%	14,400	£27	£13.5	£194,400
Surveyor	25,000	22.5%	5,625	£25	£12.5	£70,313
Other	2,000	22.5%	450	£25	£12.5	£5,625
					Total	£295,650
					Total transition cost	**£873,675**

High Scenario Transition Costs

Time to read new guidance

Profession	Number of Persons	% involved	No. involved	Hourly Fee	@ 15 min	Total Cost
Building Control Officer	4,500	60%	4,000	£60	£30.0	£108,000
Achitects	32,000	60%	25,600	£75	£37.5	£960,000
Surveyor	25,000	60%	20,000	£60	£30.0	£600,000
Other	2,000	60%	1,600	£60	£30.0	£48,000
					Total	£1,716,000

Time to amend in-house approaches

Profession	Number of Persons	% involved	No. involved	Hourly Fee	@ 8 hours	Total Cost
Building Control Officer	4,500	2.50%	113	£60	£480	£108,000
Achitects	32,000	2.50%	800	£75	£600	£960,000
Surveyor	25,000	2.50%	625	£60	£480	£600,000
Other	2,000	2.50%	50	£60	£480	£48,000
					Total	£1,716,000

Time to undertake training in new approaches

Profession	Number of Persons	% involved	No. involved	Hourly Fee	@30 min	Total Cost
Building Control Officer	4,500	45.0%	2,250	£60	£30.0	£60,750
Achitects	32,000	45.0%	14,400	£75	£37.5	£540,000
Surveyor	25,000	22.5%	5,625	£60	£30.0	£168,750
Other	2,000	22.5%	450	£60	£30.0	£13,500
					Total	£783,000
					Total transition cost	**£4,215,000**