

Changes to Part P (Electrical safety -Dwellings) of the Building Regulations in England

Consultation stage impact assessment





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Department for Communities and Local Government Eland House Bressenden Place London SW1E 5DU Telephone: 030 3444 0000

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Title					•			
Changes to Part P (Electrical safety - Dwellings) of the Building Regulations in England IA No: DCLG/0084			Impact Assessment (IA)					
			Date: 22/11/11					
			Stage: Co	nsultation				
Department for Comm	unities and Local Governr	ment		Source of	interventio	n: Domesti	C	
Other departments o	r agencies:			Type of m	easure: Se	condary leg	islation	
				Contact for enquiries: Ken Bromley				
Summary: Intervention and Options				RPC: Gr	een			
	Cost of P	referred (or mo	ore likely	) Option				
Total Net Present Value	Business Net Present Value	Net cost to business pe (EANCB on 200	<b>r year</b> 9 prices)	In scope o One-Out?	f One-In,	Measure q	ualifies as	
£135.6m	£89.0m	-£9.7m		Yes		OUT		
What is the problem Electric shock accide people. Since 1 Janus standards to comply with the provisions a costs and benefits a framework.	What is the problem under consideration? Why is government intervention necessary? Electric shock accidents and electrical fires in the home present a significant health and safety risk to people. Since 1 January 2005, all electrical work in dwellings has been required to meet with minimum standards to comply with Part P of the Building Regulations. However, there are significant costs associated with the provisions and, 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 has committed to review the regulatory framework.							
minimise the health and safety risks associated with electric shocks and electrical fires in a proportionate and cost-effective way.								
What policy options have been considered, including any alternatives to regulation? Please justify preferred								
The three policy opti costs.	ons considered are 1) (	do nothing, 2)	revoke l	Part P, and	3) amend	Part P to re	duce	
The "do nothing" approach is not preferred as it does not minimise costs to business. Option 2 is not preferred as, despite delivering significant cost savings to industry, there are significant health and safety costs to individuals which, when considered alongside the associated cost of fire damage to homes and consequent attendance by the fire and rescue service, means that there is a net cost associated with revocation of the regime. As a result, Option 3 is preferred as it significantly reduces the cost to business of Part P in a way that continues to deliver the health and safety benefits sought, thereby delivering a significant net benefit when all benefits are accounted for.								
Will the policy be reviewed? It will be reviewed. If applicable, set review date: 04/2017								
Does implementation go beyond minimum EU requirements?					N/A Small	Medium	Large	
exempted set out reas	on in Evidence Base.		Yes	Yes	Yes	Yes	Yes	
(Million tonnes CO2 equivalent)								
I have read the Impact reasonable view of the	Assessment and I am s likely costs, benefits a	satisfied that, g nd impact of t	given the he leadin	e available e ng options.	vidence, it i	represents	a	

Signed by the responsible Minister:

Awraw Stunell Date: 25 November 2011

# Summary: Analysis & Evidence

Description: Revoke Part P

#### FULL ECONOMIC ASSESSMENT

Price Base	PV Base Time Period Net Benefit (Present Va		ue (PV)) (£m)				
Year 2011	Year 2	2013	Years 10	Low: C	Optional	High: Optional	Best Estimate: £-45.2m
COSTS (£r	n)		<b>Total Tra</b> (Constant Price)	ansition Years	(excl. Tran	Average Annual sition) (Constant Price)	<b>Total Cost</b> (Present Value)
Low			Optional			Optional	Optional
High			Optional			Optional	Optional
Best Estimat	e		0			51.2	440.9
<b>Description and scale of key monetised costs by 'main affected groups'</b> The introduction of Part P was estimated to reduce the annual number of fatal domestic electric shock and electrical fire casualties by 7.6, non-fatal casualties by 517, and fires by 1450 If Part P were revoked, we contend that the increase in accidents now would not be so great due to the more widespread use of residual current safety devices (RCDs) in installations and the impact of Part P in raising the competence of installers, but would still amount to £440.9m over 10 years.							
Other key non-monetised costs by 'main affected groups' The number of registered domestic installers whose competence is assessed would fall from 38,000 back towards the pre-2005 level of 12,300 (as the absence of regulation would remove a key incentive to register), resulting in loss of income to, and probably closure of, some of the existing Part P Competent Person Schemes. Training bodies would lose income and sales of electrical test equipment would fall. Suppliers of electrical products would need to remove references to Part P from installation instructions.							
BENEFITS	(£m)		<b>Total Tra</b> (Constant Price)	ansition Years	InsitionAverage AnnualTotal BeneYears(excl. Transition) (Constant Price)(Present Value)		<b>Total Benefit</b> (Present Value)
Low			Optional			Optional	Optional
High			Optional	1		Optional	Optional
Best Estimat	e		0			46.0	395.7
<b>Description and scale of key monetised benefits by 'main affected groups'</b> We estimate that up to 25,000 electricians would not renew their registration with Competent Person Schemes, and so would not need to pay registration fees or incur the cost of notifying jobs. Unregistered electrical installers, including DIYers, would not need to pay a building control body to inspect, approve and certificate the riskier, notifiable electrical jobs – potentially saving £395.7m over 10 years.							
Other key non-monetised benefits by 'main affected groups' Installers would not need to undergo training to obtain relevant qualifications, or buy the test instruments needed to check electrical work is safe. Installers of heating, security and fire alarm systems, general builders and handymen, etc, who currently employ a registered electrician to do notifiable electrical work for them, would instead be free to do the work themselves.							
Key assump	Key assumptions/sensitivities/risksDiscount rate (%)3.5%						
It is assumed that if Part P were revoked the number of registered domestic electrical installers would over a 2 year period approach pre-2005 levels. Accident rates would rise but perhaps not to pre-2005 levels due to the Part P legacy, although hazards are increasing as electrical installations become more heavily loaded. We have assumed that, as a proportion of the falls since 2005, fatalities from electric shock would increase by 20% and other electric shock and electrical fire accidents by 80%.							
BUSINESS ASSESSMENT (Option 2)							

Direct impact on bus	iness (Equivalent Annua	In scope of OIOO?	Measure qualifies as		
Costs: £0m	Benefits: £34.5m	Net:	£34.5m	Yes	OUT

# Summary: Analysis & Evidence

Description: Retain Part P with changes

#### FULL ECONOMIC ASSESSMENT

Price Base	PV Bas	se	Time Period		Net Benefit (Present ValueLow: OptionalHigh: OptionalE		lue (PV)) (£m)	
Year 2011	Year 2	2013	Years 10	<b>Low:</b> 0			Best Estimate: £1	35.6m
COSTS (£r	n)		<b>Total Tra</b> (Constant Price)	<b>Insition</b> Years	(excl. Tran	Average Annual sition) (Constant Price)	<b>Tc</b> (Prese	otal Cost ent Value)
Low			Optional		Optional		C	ptional
High			Optional	1		Optional	C	<b>Optional</b>
Best Estimat	e		5.4			0.3		8.1
<b>Description and scale of key monetised costs by 'main affected groups'</b> There will be a transition cost of £5.4m because electrical firms and building control bodies will need to become familiar with the changes in the 2013 edition of Approved Document P. However, the time taken to understand the changes to the scope of notifiable work and the changes to third party certification are relatively straightforward and are assessed as taking no more than one hour per individual. Reducing the amount of work that is notifiable may lead to a small increase in accidents at a cost of £2.7m over 10 years.								
Other key non-monetised costs by 'main affected groups' None.								
BENEFITS	(£m)		<b>Total Tra</b> (Constant Price)	nsition Years	(excl. Tran	Average Annual sition) (Constant Price)	<b>Tota</b> (Prese	<b>I Benefit</b> ent Value)
Low			Optional			Optional	C	<b>Optional</b>
High			Optional			Optional	C	Optional
Best Estimat	e		0			16.7		143.7
<b>Description and scale of key monetised benefits by 'main affected groups'</b> The benefits will be gained by (a) reducing the amount of notifiable work and (b) allowing third-party certification of notifiable work carried out by unregistered installers – for example DIYers. Reducing the amount of notifiable work reduces costs for registered and unregistered installers and building control bodies. Allowing third party certification reduces costs for unregistered installers and building control bodies. Such changes have been estimated to save £143.7m over a 10 year period.								
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 quantified in a separate Impact Assessment for Competent Person Schemes, but would represent a further reduction in the cost associated with registration to a Competent Person Scheme (and thereby net benefit associated with Part P) of approximately £22m over 10 years.								
Key assump	Key assumptions/sensitivities/risksDiscount rate (%)3.5%				3.5%			
Changes to regulations will reduce the amount of notifiable work from 45% to 40% and 5% to 4% for professionals and DIYers respectively. Third party certification will reduce costs for unregistered installers from £241 to £150 per job due to the effects of competition. The cost (increased accidents) of making minor work non-notifiable is assumed to be half that for other, higher-risk notifiable work. 1.5 engineers in every firm and all building control officers will spend one hour to understand the changes.								
BUSINESS A	SSESSN	IENT (	Option 3)					

Direct impact on bus	iness (Equivalent Annua	In scope of OIOO?	Measure qualifies as	
Costs: £0.6m	Benefits: £10.9m	Net: £10.3m	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, P1, 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 a qualified installer registered with a DCLGauthorised Part P Competent Person Scheme. Registered installers are allowed to selfcertify 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.
- 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 we originally 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 £231 per job, and saves the time of having to complete a building notice to the building control body, which takes approximately 10 minutes. 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 and on occasion their work tested, for which they pay an annual registration fee to the scheme operator.

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, plays an additional role into the future 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. This Impact Assessment seeks to establish the optimum balance between safety and cost.

## 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 for the higher-risk types of work there was a check that this had happened (either by a building control body or by individuals who were members of schemes that ensured they had the skills necessary to certify their own work).
- 10. Effectively, Part P ensured that consumers could be confident that the work being done in their home was to acceptable safety standards and for DIYers that any higher-risk work that they undertook was subject to scrutiny to ensure it was 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 lacked the necessary knowledge and information to ensure the work they were paying to have carried out was 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, together with details of DCLG's future work to amend the Building Regulations.
- 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 in the home in the most cost-effective manner.
- 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, improve the quality of electrical installation work, and reduce electrical accident rates.

# The options considered

17. Three options are considered in detail in this Impact Assessment:

Option 1: do nothing

Option 2: revoke Part P

Option 3: retain Part P with changes.

#### **Option1: do nothing**

18. Option 1, "do nothing", is not preferred because it would miss the opportunity to minimise costs currently associated with Part P.

#### **Option 2: revoke Part P**

19. Option 2, "revoke Part P", is also not preferred because it would significantly reverse the improvements in the quality of electrical installation work that have occurred since the introduction of Part P in 2005. This risk could be exacerbated as hazards continue to increase as electrical installations become more and more heavily loaded with electrical appliances and devices (including the emerging technologies referred to in paragraph 7 above).

#### **Option 3: retain Part P with changes**

20. Option 3, "Retain Part P with changes", is the preferred option as it significantly reduces the cost to business of Part P in a way that continues to deliver the health and safety benefits sought, thereby delivering the largest net benefit when all benefits are accounted for.

# Costs and benefits

21. 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
- 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.
- 22. The Building Regulations apply 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 will be 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. The underlying figures informing the costs and benefits have been adjusted to reflect this (based on the relative population of the two countries from the most recent census for which figures are available and where England accounts for 94.4% of the combined population of the two countries). Similarly, where figures relate to a price in a particular year these have been updated using the GDP deflator.
- 23. The key figures that inform the monetisation of options in this consultation stage 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
  - The average building control charge is £231 and the accompanying building notice takes10 minutes (and therefore costs £10) to complete (so that the total cost of submitting a notifiable job to a building control body is £241)
  - The average registration fee is £381
  - 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).

Other figures and assumptions are identified as appropriate below.

- 24. EC Harris have now started a second study to examine costs in more detail and to analyse the most recent electrical accident statistics. In addition, further information will be obtained through the Part P consultation exercise and both these, along with other consultation responses and engagement with external partners, will inform further policy development and be reflected in an Implementation Stage Impact Assessment.
- 25. The monetised costs and benefits given below are all over a period of 10 years discounted at 3.5% to present value. As stated previously, the primary objective of Part P is to reduce the number of deaths and injuries associated with electrical work in the home, and this falls clearly within the scope for which Building Regulations can be made. Reducing the fires associated with electrical installations not only reduces deaths and injuries, but also reduces the cost associated with fire damage to property and the cost of attendance by the fire and rescue services. However, these are not benefits which Building Regulations are primarily intended to address, and although it is proper to reflect them in an Impact Assessment, they do not generally figure in the consideration of whether or not it is appropriate to regulate in the first place. Where possible, therefore, figures below distinguish between health and safety-related costs and non-health and safety ones.

#### **Costs – Option 1: do nothing**

26. There are **no additional costs** associated with this option.

#### Benefits – Option 1: do nothing

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

#### Summary – Option 1

28. There are no *additional* costs or benefits of a "do nothing" approach.

#### Costs – Option 2: revoke Part P

- 29. The costs of revoking Part P would be the lost benefit of the reduction in electric shocks and electrical fires that results from the regulatory framework put in place by Part P.
- 30. The 2004 Part P Impact Assessment estimated that annually in dwellings in England:
  - 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.
- 31. An initial analysis of electrical accident rates suggests that there have indeed been reductions in the overall numbers of electrocutions and electrical fires since Part P came into effect. However, it is not possible to determine how much of this is attributable to Part P since accident rates would be expected to fall anyway as older installations are gradually modernised. Conversely, potential hazards are increasing as more electrical appliances are introduced into the home and the loading on existing circuits increases.
- 32. Therefore, statistics are not available that definitively evidence the contribution that Part P makes to the overall improvement in electrical accidents and incidents. However, 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.
- 33. Figures obtained from the Competent Person Scheme operators indicates that there are now around 38,000 electricians registered with Part P schemes around 25,500 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.
- 34. The latest DCLG statistics for Part P Competent Person Schemes show that in the year to September 2010 electrical installers carried-out and self-certified nearly 1.32 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.
- 35. 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. 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.
- 36. 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)

- 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.
- 37. However, we also recognise that if Part P were to be revoked it would not be reasonable to assume that all of the original benefits would necessarily be lost and that accident rates would simply return to pre-2005 levels. This is principally due to two factors. First, changes in electrical installation practice means that the percentage of dwellings fitted with residual current devices (RCDs) sensitive protection devices that almost eliminate electric shock fatalities has increased to around 50% of all homes. Secondly, there has also been in improvement in the competence of domestic electrical installers due to the impact of Part P and this would have some ongoing benefit even if the Part P regime were to be revoked.
- 38. We have assumed that, as a percentage of the drop since 2005, there would be increases of:
  - 20% in electric shock fatalities
  - 80% in electric shock injuries (since severe shocks are not prevented by RCDs)
  - 80% in electrical fires and in fire fatalities and injuries (since RCDs are generally estimated to prevent 20% of electrical fires)<sup>1</sup>.
- 39. Based on the figures and assumptions set out above, option 2 results in the costs (lost benefits) set out in the tables below.

	Fatal	Non-fatal
Electric shocks avoided as a result of Part P	3.3	409
Increase if Part P revoked (%)	20%	80%
Increase if Part P revoked (number)	0.66	327.2
Fire accidents avoided as a result of Part P	4.3	109
Increase if Part P revoked (%)	80%	80%
Increase if Part P revoked (number)	3.44	87.2
Total increase from 2011	4.1	414.4
Value of each (£)	£1,681m	£80,050
Cost – one year (£m)	£6.89m	£33.17m
Cost – 10 years (£NPVm)	59.78	285.54
TOTAL COST – 10 YEARS (£NPVm)	34	5.32

Costs – Health and Safety-related

<sup>&</sup>lt;sup>1</sup> AH Powell, AW Axtell. Residual current devices - added value for home safety. Consumer Safety Research Report, DTI, October 1997. Available at http://www.ergo-eg.com/uploads/books/safety%20considerations.pdf

#### Costs - Non-Health and Safety-related

	Property Damage	Fire Attendance
Fires avoided as a result of Part P	1,450	1,450
Increase if Part P revoked (%)	80%	80%
Increase if Part P revoked (number of fires)	1,160	1,160
Value of each (£)	£5,220	£4,360
Cost – one year (£m)	£6.06m	£5.06m
Cost – 10 years (£NPVm)	52.12	43.53
TOTAL COST – 10 YEARS (£NPVm)	9	5.65

- 40. The total cost of revoking Part P over a 10 year period in England is, therefore, £345.3m in health and safety-related costs and an additional £95.6m in other costs a **total cost of revocation of £440.9m**.
- 41. However, it is recognised that the cost of revoking Part P is primarily dependent upon the assumed increase in electric shocks and electrical fires that would result from the revocation of Part P. Given that the above estimate assumes an 80% increase in shock injuries and fires, we have done a sensitivity test based on an increase of 60% (rather than 80%) for non-fatal shocks and fires (leaving shock fatalities at 20%, given this already assumes a low impact of revocation). Using these revised figures would deliver total costs of £335.3m (as opposed to the £440.9m set out above).

#### Benefits – Option 2: revoke Part P

- 42. The benefits of revoking Part P would be the savings that electrical installers make through not having to be registered or to pay a building control charge when doing notifiable work, and the administration savings made by building control bodies. The benefits of Option 2, therefore, are the potential removal of the costs of the operation of Part P.
- 43. Drawing on the key figures set out at the beginning of this Costs and Benefits section allows us to update the costs of Part P set out in the original 2004 Impact Assessment based on some of the actual costs that have been associated with its operation. For example, the actual building control fee is estimated to be higher at £231 than the £50 to £100 originally estimated, although the cost of annual registration with a Competent Person Scheme is actually lower at £381 than the £500 to £1,000 originally assumed.
- 44. We have therefore recalculated the main cost elements of the Part P regime the costs to business of building control fees and the costs associated with self-certification through a Competent Person Scheme. Costs over 10 years of each of these elements are £222.2m and £173.5m respectively. Therefore the potential benefit of revoking Part P would be £395.7m.
- 45. These benefits would largely accrue to business, but an element of the above saving would fall to DIYers through no longer having to submit notifiable work. This is equivalent to 5% of the 950,000 jobs carried out each year at a saving of £241 per job. This produces annual savings of £11.85m or £98.5m over a 10 year period. Conversely the benefits to business are, therefore, £297.2m over a 10 year period.

#### Summary – Option 2

46. The table below provides a summary of the costs and benefits associated with total revocation of the Part P regime.

Benefit of getting rid of the cost of Part P	395.7m
Cost (health and safety)	345.3m
Cost (non-health and safety)	95.6m
Net Benefit (health and safety only)	50.4m
Net Benefit (including non-health and safety)	-44.8m

47. There is, therefore, a **10 year net** *cost* of revoking Part P in England of £44.8m. We believe that the assumptions underlying this estimate are reasonable, but we will test this further at consultation – in particular that the cost of revoking Part P would be to forego 20% of the benefit of reduced fatalities from electric shock and 80% in terms of non-fatal shock and fire. Assuming a significantly lower cost (only a 60% increase for non-fatal shock and fire) would lead to the revocation of Part P delivering a net 10 year *benefit* of £60.7m. However, because none of the costs are borne by business there is a net benefit to them of this proposal of £395.7m.

#### **Option 3**

- 48. This option seeks to maintain the benefits related to controlling electrical work while reducing the associated costs. It does so in two main ways: 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).
- 49. In addition, we will take the opportunity to make minor changes to the guidance in the Approved Document to ensure the guidance 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; reference to the latest edition of the national standard for electrical installation work (BS 7671:2008); and bringing the technical guidance in the appendices into line with the standard. 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.

#### Costs – Option 3: retain part P with changes

- 50. 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.
- 51. We have assumed that on average 1.5 qualified supervisors or engineers in 58,000 registered and unregistered firms, and 4,000 building control officers would need one hour to become acquainted with the changes. We have also assumed a shadow value of £60 on their time. This leads to transition costs of £5.2m to business and £0.2m to building control bodies.
- 52. **Transition costs in England are estimated, therefore, to be approximately £5.4m.** These one-off costs are likely to fall primarily in 2013.

- 53. Assessing potential costs to an amended Part P regime (as with assessing potential costs of revoking Part P under Option 2) is not straightforward as it is, in the absence of robust supporting evidence, primarily dependent on the assumed increased incidence of electrical accidents that results from a reduction in regulation.
- 54. With regard to reducing the amount of notifiable work, initial estimates (which will be tested further as part of the consultation process) are that for the 2.65m jobs done by electrical contractors the amount of their work that is notifiable would, as a result of this proposal, fall from 45% to 40% and remove approximately 130,000 jobs from being notifiable. Of this figure, 95% will be carried out by members of a Competent Person Scheme who we assume will carry out the work to the same standard as if it was notifiable work. This means that approximately 6,000 jobs will be undertaken by someone in the construction industry who carries out electrical work, whether a qualified electrician or not, but who is not registered with a Competent Person Scheme. While the vast majority, if not all, will be done competently, the third-party check to ensure this is the case will have been removed and there is, therefore, a potential cost.
- 55. Similarly, it is estimated that the proportion of the 950,000 jobs carried out by DIYers that is notifiable will fall from 5% to 4% by approximately 9,500 jobs per year. Again, the fact that there will be no third-party check on this work (albeit simpler and lower-risk work) means there is a potential cost from work that is potentially dangerous not being picked up by a third-party.
- 56. As set out in Option 2 above, the total cost of revoking Part P and thereby removing approximately 1.24 million jobs from being notified has an associated one year cost of £51.2m, or £440.9m over 10 years. Option 3 proposes removing approximately 15,500 jobs from notification, which is 1.2% of the total removed under Option 2. If costs were proportionate this would suggest that one year and 10 year costs of Option 3 might be in the order of £0.61m and £5.29m respectively. However, the aim of this option is to remove those types of work that are lower risk for example, minor alterations in the kitchen as opposed to house rewiring. We believe, therefore, that it would be appropriate to reduce these costs to reflect the lower-risk nature of the work and have done so by 50%. This results in estimated one and 10 years costs of **£0.3m and £2.65m** respectively. These costs do not fall on business.
- 57. The other element of the Option 3 amendments is providing the opportunity for greater thirdparty 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. As such, we believe there are no costs to this element of our proposal.

#### Benefits – Option 3: retain Part P with changes

- 58. Our proposed changes to Part P seek to reduce the costs associated with Part P while maintaining the health and safety benefits. This is proposed to be done by reducing the amount of notifiable work and by allowing for third-party certification of work when the work is carried out by people who are not members of Competent Person Schemes.
- 59. Firstly, 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 namely minor alterations to existing circuits in kitchens and outdoors. Most other types of electrical alteration work are already non-notifiable leaving only alteration work in bathrooms requiring approval.
- 60. As stated above, initial estimates are that for the 2.65m jobs done by electrical contractors the amount of their work that is notifiable would, as a result of this proposal, fall from 45% to 40% removing approximately 130,000 jobs from being notifiable.

- 61. Given that 95% of notifiable work is carried out by members of Competent Person Schemes, this means that 123,500 jobs (at an average cost of £3.50 per job) by members of self-certification schemes and 6,000 jobs by unregistered contractors (at an average cost of £241 per job) would no longer have to be notified – approximate savings of £430,000 and £1.45m to registered and unregistered electricians respectively. In addition, the number of notifiable jobs by DIYers would fall from 5% to 4% of the 950,000 jobs carried out (again at an average cost of £241 per job) – an annual saving of £2.29m to the DIYer. In total, therefore, reducing the scope of notification delivers a cost saving of £4.17m per year or £35.9m over a 10 year period. Of this £1.88m per year is a saving to business (or £16.17m over a 10 year period).
- 62. 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 it 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. While not a driver for pursuing this proposal, it is an additional benefit that registered installers would no longer be at a competitive disadvantage for this type of smaller-scale, lower-risk work.
- 63. Secondly, we propose to allow for third-party certification of work that has been carried out by someone who is not a member of a Competent Person Scheme. We will test the detail of how this works at consultation. We believe that there are two possible ways that could be made available under these proposals providing the flexibility for individuals to decide which route is the more suitable/cost-effective for them.
- 64. The first approach would be to permit suitably trained and qualified members of Competent Person Schemes to certify the work of others who are not registered electricians, thereby by-passing the building control body entirely. Initial engagement with external partners suggests that scheme operators believe that, in addition to a final inspection, this option should include supervision and inspection while the job is being undertaken. On that basis, we estimate that the cost for this type of third-party certification would be approximately £150.
- 65. An alternative approach would be to permit any qualified electrician to inspect work by unregistered installers, and to issue a "condition report" following only a final inspection of the completed work (that is by-passing an intermediate inspection of work-in-progress), but which would be subject to final formal sign-off by the building control body. This approach would only deliver potential savings if the fees charged by the building control body properly reflected the reduced cost to them of the notification (by generally accepting the condition report as demonstrating compliance with the regulations). DCLG envisages, therefore, that it would need to be underpinned by changes to the local authority building control charges regulations that came fully into effect in October 2010, and working with LABC (Local Authority Building Control) on a model charging scheme to encourage local authority building control bodies to charge fees that properly reflect the work involved with their consideration. We estimate that overall charges are likely to be similar to those set out above £80 for production of a "condition report" by a qualified electrician and a reduced building control fee of £70 (including the £10 cost in time of notification by the installer).
- 66. This means that for DIYers the average saving per job through introducing third party certification is £91 (the average building control fee and notification of £241 minus the cost of third-party certification of £150). 4% of the 950,000 jobs carried out by DIYers are notifiable, so the potential saving is £3.46m per year or £29.78m over 10 years. This is a saving to DIYers rather than business.
- 67. The savings per job for qualified electricians who are not registered would be more significant, as they would be able to produce their own electrical installation certificate and thereby avoid the £80 cost associated with employing an electrician to provide a condition

report. Their only cost would be the building control charge of £70. Unregistered electricians carry out about 5% of the 1.06 million notifiable jobs carried out by all qualified electricians each year, so the savings would be higher at £9.06m (77.98m over 10 years). This benefit accrues solely to business.

- 68. This produces cost savings through third party certification of £107.76m over 10 years. Given the £35.9m savings through lower levels of notification, the total benefit of Option 3 is £143.7m (£94.2m to business and £49.5m to DIYers).
- 69. An additional benefit of such an approach is that the change has the potential to substantially reduce the inspection burden on local authorities as less work would be notified and the inspection burden would be shared with third parties. While local authorities are able to charge for carrying out this work, freeing them from having to do so enables them to target their limited resources elsewhere (and on those types of other building work where it is not appropriate for it to be certified by a third party).

#### Summary – Option 3

70. Based on the figures above, therefore, amending Part P would produce a net benefit of £135.6m over 10 years (£143.7m less one-off costs of £5.4m and ongoing costs of £2.7m). The net benefit to business would be £89.0m (£94.2m benefits minus £5.2m transitional costs).

# Direct costs and benefits to business calculations (following "One In One Out" methodology)

- 71. For Option 2, revoking Part P, the costs will fall on householders while the present value benefit to business will be £297.2m over 10 years, which translates to an annual equivalent net benefit to business of **£34.5m**.
- 72. For the preferred Option 3 the present value cost to business is estimated at £5.2m while the present value benefit is £94.2m, which translates to an annual equivalent net benefit to business of **£10.3m** at 2011 prices (or £9.7m at 2009 prices).

### **Risks and Assumptions**

- 73. The assumptions used in arriving at the costs of pursuing Options 2 and 3 are stated in the preceding paragraphs. In addition, DCLG has contracted consultants to carry out further work, and the consultation paper on this proposal will include specific questions to obtain up-to-date evidence and views on the following:
  - The market for electrical installation work, including the numbers, types (notifiable and non-notifiable) and value of jobs done by professionals and DIYers
  - The number and competence of installers doing electrical work who are electricians, other installers, and DIYers
  - The number of registered and unregistered installers doing electrical installation work, and the number who may yet be persuaded to register
  - The number that would maintain their registration if Part P were abandoned
  - Local authority building control charges (following the introduction of the new charging regulations), and how they vary with the competence of installers
  - Local authority expectations of installers (for example to provide an electrical installation certificate)

- Competent Person Scheme registration, notification and training charges
- The impact on scheme operators if registration numbers fall
- Statistics for fatalities, injuries and fires arising from accidents with an electrical cause.

## Wider impacts

#### Equalities Impact Test

74. 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**

75. The proposed policy aims to reduce the cost and bureaucratic burden that Part P imposes on businesses. 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.

#### Small Firms Impact Test

76. 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.

#### Environmental Impact Tests

77. 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

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

#### Sustainable Development

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

# Summary and preferred option with description of implementation plan

80. Option 2 delivers significant potential savings, but when all costs are considered (including property damage and fire attendance) there is a 10 year net *cost* of £44.8m. Option 3 delivers, however, significant net benefits of £135.6m by maintaining the benefits associated with regulation through Part P, but by significantly reducing the associated costs. On that basis, the preferred approach is to amend the Part P regime to reduce its cost while maintaining the benefits from reduced injury, damage and fire attendance.