

Summary: Intervention & Options

Department /Agency: Department for Innovation, Universities and Skills	Title: Impact Assessment of Cross-Government commitment to promote apprenticeships in construction procurement	
Stage: Final Proposal	Version: 2.0	Date: 21 November 2008
Related Publications: World Class Skills (DIUS & DWP), Work Skills (DIUS & DWP), World-Class Apprenticeships (DIUS and DCSF), Leitch Review of Skills (independent)		

Available to view or download at:

<http://www.>

Contact for enquiries: Andrew Price

Telephone: 0203 300 8910

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

In a worsening economic climate, there is evidence that construction employers are reducing their commitment to training and, in particular, to supporting apprentices. Government intervention is necessary to address the market failures that prevent construction employers from recognising the longer-term benefits of investing in skills through difficult economic conditions. Intervention is also crucial to ensure an adequate supply of skilled construction labour to deliver construction projects such as Crossrail and the Olympics.

What are the policy objectives and the intended effects?

To improve the quality of services delivered under Government contracts by ensuring employers working on public contracts invest in apprenticeships, and to leverage Government spending on construction to increase numbers of apprentices in the sector. The aim is to offset the expected loss in apprentices resulting from the downturn and reduce the risk of future construction skills gaps and shortages. Intended effects: employees are motivated, retained and better equipped to deliver services. Employers have improved productivity and report fewer skills gaps and shortages. Procurers secure VfM.

What policy options have been considered? Please justify any preferred option.

Lead policy option considered in this Impact Assessment: requiring Departments to consider asking contractors to include a proportion of apprenticeships on a case by case basis,
'Do nothing' option: On consideration we concluded that this was not viable on the grounds of the impact on the Government's policy objectives (see Evidence base for background).

When will the policy be reviewed to establish the actual costs and benefits and the achievement of the desired effects? Initial review within 12 months of the policy being implemented, with a review of progress at six months.

Ministerial Sign-off For final proposal/implementation stage Impact Assessments:

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) the benefits justify the costs.

Signed by the responsible Minister:

..... Date:

Summary: Analysis & Evidence

Policy Option:	Description: requiring Departments to consider asking contractors to include a proportion of apprenticeships on a case by case basis
-----------------------	---

COSTS	ANNUAL COSTS		Description and scale of key monetised costs by 'main affected groups' Implementation costs to firms as a result of increased contract paperwork and monitoring for those with apprentices
	One-off (Transition)	Yrs	
	£ 0	0	
	Average Annual Cost (excluding one-off)		
	£ 327,800	Total Cost (PV) £ 327,800	
Other key non-monetised costs by 'main affected groups'			

BENEFITS	ANNUAL BENEFITS		Description and scale of key monetised benefits by 'main affected groups' Benefits in terms of increased productivity of qualified apprentices, as proxied by wages.
	One-off	Yrs	
	£ 0	0	
	Average Annual Benefit (excluding one-off)		
	£ 51m	Total Benefit (PV) £ 51m	
Other key non-monetised benefits by 'main affected groups'			

Key Assumptions/Sensitivities/Risks Sensitivity analysis carried out and shown in 'Evidence base' section

Price Base Year 78	Time Period Years 1	Net Benefit Range (NPV) £ 50m	NET BENEFIT (NPV Best estimate) £ 50m
-----------------------	------------------------	---	---

What is the geographic coverage of the policy/option?			England		
On what date will the policy be implemented?			November 2008		
Which organisation(s) will enforce the policy?			Govt depts		
What is the total annual cost of enforcement for these organisations?			£ 0		
Does enforcement comply with Hampton principles?			Yes		
Will implementation go beyond minimum EU requirements?			No		
What is the value of the proposed offsetting measure per year?			£ N/A		
What is the value of changes in greenhouse gas emissions?			£ N/A		
Will the proposal have a significant impact on competition?			No		
Annual cost (£-£) per organisation (excluding one-off)		Micro	Small	Medium	Large
Are any of these organisations exempt?		No	No	N/A	N/A

Impact on Admin Burdens Baseline (2005 Prices)			(Increase - Decrease)
Increase of £	Decrease of £	Net Impact	£ N/A

Key: Annual costs and benefits: Constant Prices (Net) Present Value

Evidence Base (for summary sheets)

[Use this space (with a recommended maximum of 30 pages) to set out the evidence, analysis and detailed narrative from which you have generated your policy options or proposal. Ensure that the information is organised in such a way as to explain clearly the summary information on the preceding pages of this form.]

The case for investing in skills

1. There is a clear rationale for investment in the skills of the population. Evidence demonstrates that the skills of the workforce are a key driver of progression for individuals and of productivity of firms and of the economy as a whole. Studies have show that:
 - i. Increasing the literacy score of a country by 1 per cent leads to a 2.5 per cent rise in labour productivity and 1.5 per cent increase in GDP per head;
 - ii. For every additional 10 percentage points of the workforce trained there are on average 6% productivity returns; and
 - iii. Apprenticeships at Level 2 and Level 3 offer strong returns to individuals and employers. An advanced apprenticeship offers wage returns to the individual of 35%.
2. Skills also play a key role in improving social mobility and offer wider social benefits. For example:
 - i. Children of parents with only very basic numeracy are twice as likely to be in the bottom 20% of aged 5 as those whose parents have Level 2 numeracy;
 - ii. Men with poor literacy at age 21 were 50% more likely to have a criminal conviction by age 30 than those with good literacy skills; and
 - iii. Half of learners in FE felt that their studies had encouraged them to take part in voluntary and community activities.
3. The UK's skills base has suffered from historic deficits built up over a long period of time. Despite areas of excellence, including a higher education system that can be characterised as world-class, the UK possesses a high proportion of the working age population who have no formal qualifications or low levels of qualifications.
4. One of the key explanations for the poor performance of the UK in relation to skills levels is the underinvestment in training. The evidence points to a number of market failures that prevent firms and individuals from training to an optimal level for society as a whole, including:
 - i. **Imperfect information** – employers or individuals lack reliable information on quality and content of learning opportunities, and benefits that may accrue from investment;
 - ii. **Short-termism and risk aversion** – individuals and organisations may fixate on the short-term and ignore long-term benefits. In addition, both

firms and individuals may be risk averse, and the return on investment in skills are often uncertain;

- iii. **Capital market imperfections** – problems may be encountered in obtaining funding to invest in skills.

5. These economic and social justice arguments underpin the Government's rationale for investing in improving adult skills, focusing public resources on subsidising training for the lowest skilled, where the evidence suggests that the market failures are most acute.

The case for investing in apprenticeships

6. Apprenticeships are a key route through which the Government supports individuals to gain new skills. Apprenticeships are a form of high-quality, vocational training based on a mixture of work-based and theoretical learning. In an Apprenticeship, the Government will cover a high proportion of the training costs associated with an apprenticeship - 100% of the cost for 16 to 18 year olds and two-thirds of the cost for apprentices aged 19+.

7. In return for the commitment to an apprenticeship made by the employer and the employee, evidence suggests there are significant benefits to both groups. For individuals there are high wage returns to apprenticeships, and qualified apprentices are also much more likely to be in work. The highest returns are found in the construction sector, the focus of this intervention.

8. For firms, case studies have found that firms who hire apprentices believe that apprenticeships can help to reduce staff turnover, increase productivity and help transfer skills across the firm.

Rationale for policy option

9. As the Leitch review of skills, published in December 2006, set out, we need to go much further in tackling the market failures that limit the investment that employers and individuals make in skills. In particular, the review recommended that the Government aim for a new ambition for the UK to have a world-class skills base by 2020, defined as being in the upper quartile of OECD countries in terms of our skills profile. This is an ambition that the then Chancellor of the Exchequer, Gordon Brown, accepted in the 2006 Pre-Budget Report.

10. This is a stretching ambition and requires significant increases in the numbers of employers and individuals engaging in skills and training. This is particularly the case in apprenticeships where the aim is to have 130,000 apprentices a year completing a full apprenticeship framework by 2011. In addition, over the next decade we want 1 in 5 young people to be participating in apprenticeships.

11. However, in the current challenging economic climate, progress on this ambition will be challenging, as we expect employers to reduce their investment in skills and training.

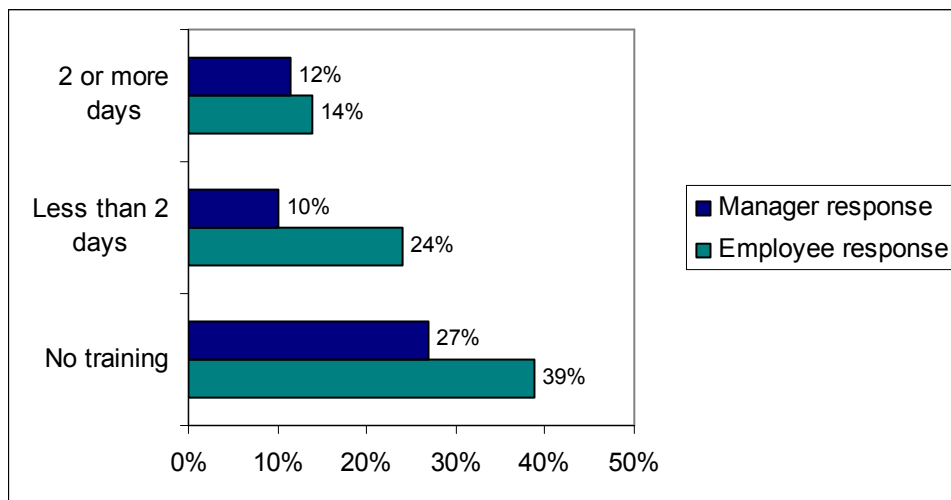
12. This is a particular concern in the construction sector. ConstructionSkills, the Sector Skills Council for the construction sector, estimates that up to 8,000 workers have already been made redundant in the house building sector. During the downturn of the 1990s a great number of apprenticeship places in construction were lost as employers sought to cut costs.

13. Early signs are that this will happen again unless we act to stimulate and support apprenticeships. Analysis undertaken by the Home Builders' Federation suggests that approximately 670 apprentices are at immediate risk of redundancy following completion of their Apprenticeship frameworks. A further 240 are at risk of not completing their apprenticeships due to potential redundancy.

14. There are strong economic arguments for firms to continue to invest in skills in difficult times. There is evidence that firms that invest in training are less likely to go out of business than those who don't train. A recent study by Collier et al (2007) used data on 2,062 establishments from the Workplace Employment Relations Survey (WERS) to study the factors affecting the probability of closure between 1998 and 2004

15. The research looked at the correlation between the amount of training received by employees and the survival of the establishment. Figure 1 below shows that the probability of closure declines sharply if some training is provided. 39 per cent of establishments that provided no training to employees were observed to close during the period, compared to 14 per cent when two or more days of training occurred.

Figure 1: Probability of closure by amount of reported training



Source: Collier et al (2007), WERS 1998 and 2004

16. It is also crucial that we maintain a strong supply of skilled construction labour in the economy, to meet future demand. A serious reduction in the supply of skilled labour would increase the risks around delivery of major construction programmes, such as Crossrail, the Olympics, and our house building plans.

17. The 'do nothing' option is not feasible if we are to maintain progress towards the Government's world-class ambition, and counteract the negative impact that the worsening economic climate will have on this ambition.

Chosen policy option

18. Our proposal is to make greater use of the £175bn that the Government spends every year on procuring goods and services, by embedding skills and training requirements in public procurement processes.

19. The policy intent is to require Departments and Agencies to consider, on a case-by-case basis, incorporating a requirement in their procurement processes that successful contractors have apprentices as an identified proportion of their

workforce on a particular project or programme. All Government departments are signed up to this approach. This approach is also strongly supported by employers in the sector.

20. This policy would build on a number of recent steps to embed skills considerations into the public procurement process:

- i. The 'Joint Statement on access to Skills, Trade Unions and Advice' agreed between central Government, Trade Unions and private and third sector organisations in July 2008. The Joint Statement aims to improve the quality of services delivered under Government contracts by raising the skills of service providers' employees, and by ensuring fair treatment of employees; and
- ii. Commitments made by DIUS to skills in its 'Building Colleges for the Future' (BCF) programme. The Learning and Skills Council, who is responsible for delivering BCF, now expects all contractors who access public funding to have in place a formal training plan that maximises access to apprenticeships, work-based learning and other training opportunities. Similar commitments are in place for the 'Building Schools for the Future' capital programme.

21. The policy would not involve a blanket requirement that a specified proportion of all a contractor's workforce would be apprentices. The policy intent is that Departments and their Agencies consider the requirement for apprentices on a contract-by-contract basis. Specifying that a proportion of the workforce be apprentices would only be considered where it is:

- i. Proportionate to the size and scope of the contract;
- ii. Relevant to the requirement;
- iii. Consistent with the obligations on public procurers to obtain value for money; and
- iv. In line with European procurement rules.

22. The policy will only apply to construction-related contracts let by Central Government Departments and their Agencies in England. We are looking at a possible second phase extension to cover the IT sector. The potential for a second phase is not analysed in this document, as it is subject to a separate decision-making process.

23. The policy can be summarised as Departments and their Agencies Government, when operating as contracting organisations:

- i. Using the formal procurement process to identify on a contract by contract basis the proportion of the workforce that would need to be apprentices to ensure successful contract delivery, taking into account whole life cost, quality of service and value for money. Commissioning authorities will ensure such skills-related criteria are reflected in the contract specification and taken into account in assessing tenders; and
- ii. Including performance conditions in contracts, to ensure that employees delivering the services have the necessary skills to provide the quality and efficient services specified.

Impact on business

24. The impact of this policy will extend to those businesses which contract directly with Government departments and their agencies to deliver construction-related services.

25. It is difficult to estimate the scale of the impact on those businesses, as the impact will depend on the decision made by procurers about the extent to which they wish to embed this requirement. These decisions will be made on a case-by-case basis.

26. In the Costs and Benefits section, we include an illustration of the possible implementation costs for employers, drawing on a recent Impact Assessment on the 'Joint Statement on access to Skills, Trade Unions and Advice', published in March 2008. This is illustrative only. We have no clear basis for assuming that these costs will be applicable in this policy proposal. In many cases, we would expect the cost of implementation to be borne by employers to be minimal, as government bear most of the training costs of apprentices.

Impact on small businesses

27. Discussion with stakeholders including the Federation of Small Businesses and the Federation of Master Builders has highlighted concerns that smaller businesses may have greater difficulty in making the kind of commitment that this policy requires. However, all see the future benefits of skills and training.

28. In implementing this policy the procuring body would be expected to take into account factors, such as the size of potential contractors, when making decisions on the extent to which they embed apprenticeship requirements in their procurement process. The Government is committed to ensuring that its contracts remain accessible to small businesses, including those owned and managed by women or ethnic and/or minority groups, as well as supporting factories and businesses for people with disabilities. Government guidance suggests that accessibility for these groups of suppliers can be further improved by engaging with them to find out what they can provide and by ensuring advertisements for contracting opportunities can reach them. The Government has taken steps to make it easier for suppliers to find contracting opportunities. For example, the Supply2.gov web portal provides business with easy access to lower value contracts (typically below £100,000). <http://www.supply2.gov.uk/>.

29. Procurer's decision-making will be supported by Office for Government Commerce (OGC) guidance: *Promoting Skills through Public Procurement* that focuses solely on skills issues, and which clearly sets out what is permissible and how procurers can most effectively embed requirements in their procurement processes in a way that is: proportionate, relevant to the contract, provides value for money and does not unfairly discriminate against any potential suppliers.

30. In the case where the procuring body embeds the requirement in a way that requires a business to take on a new apprentice, the net impact on the business would be a positive one. The apprentice's low wages, combined with his/her increasing productivity, and government contribution towards training costs, make for very good rates of return for any employer taking one on. Please see the cost benefit analysis section (paragraphs 37 – 39).

31. As explained in the 'Impact Assessment of Apprenticeships Review Policies' published in July 2008 smaller firms may face greater challenges in realising these benefits, as they take greater proportional risks by taking on a worker who is untried

and may often be young and straight out of full time education. This document goes on to explain that a number of actions to minimise this risk on small businesses are being taken forward.

32. Many of the proposals are specifically intended to help small business to take on apprentices by removing barriers. Group Training Associations will share the burdens of bureaucracy involved in taking on an apprentice, and the employment risk, by sharing the apprentices between a number of SMEs. The national matching service will remove the difficulty some small employers find in recruiting from a wide enough pool, and the information provided by the National Apprenticeships Service will make it easier for small employers to get the advice and guidance that they need. Most significantly increasing the number of apprentices in small business will raise the skill levels of those businesses and improve their competitiveness.

33. We would expect the measures described above to mitigate any potential negative impact on small firms including those of 20 employees or less.

Impact on Third Sector

34. We would not expect this policy to disadvantage third sector employers seeking to access contracts with Government Departments and their Agencies. Procurers will be expected to take into account factors such as the type of organisation when making decisions on the extent to which they embed apprenticeship requirements in their procurement process.

Risks and issues

35. EU law constraint the extent to which skills and training requirements can be written into contract specifications. The law on public procurement is set out in the following European Union (EU) Procurement Directives:

- i. Directive 2004/18/EC of the European Parliament and of the Council of 31st March 2004 on the coordination of procedures for the award of public works contracts, public supply contracts and public service contracts; and
- ii. Directive 2004/17/EC of the European Parliament and of the Council of 31st March 2004 coordinating the procurement procedures of entities operating in the water, energy, transport and postal services sectors.

36. The Public Contracts Regulations 2006 and the Utilities Contracts Regulations 2006 implement them in the UK.

37. A formal blanket assumption on the proportion of apprentices that a contractor must employ would present serious risk of contravening the EU directives and UK regulations. Therefore we have not pursued this approach. The policy proposal for procurers to consider requirements on apprenticeships on a case-by-case basis is consistent with the EU Procurement Directive and UK regulations.

38. Recital 33 of the Public Procurement Directive provides further guidance on the use of social clauses in contract conditions: 'Contract performance conditions are compatible with this Directive provided that they are *not directly or indirectly discriminatory* and are indicated in the contract notice or contract documents. They may, in particular, be intended to favour on-site vocational training, the employment of people experiencing particular difficulty in achieving integration, the fight against unemployment or the protection of the environment.'

39. Detailed guidance is available from OGC which describes how such requirements can be used and reflected in procurement processes (Social Issues in Purchasing – available at www.ogc.gov.uk).

Costs and benefits

Benefits

40. The benefits of an apprenticeship were considered by MacIntosh(2007) “A cost-benefit analysis of Apprenticeships and other Vocational Qualifications.” Taking into account the social costs and benefits involved, he found the NPV of an apprenticeship in Construction to be £156,523.

Table 9: Cost-Benefit Analysis of Modern Apprenticeships by Sector

1996-2005

	IRR	NPV	NPV/DfES £
Construction	30%	£156,523	£27.41
Engineering	15%	£78,351	£11.56
Hospitality	118%	£57,994	£14.78
Business Administration	18%	£56,765	£15.32
Retail and customer service	54%	£31,928	£8.80

41. These are the benefits for each qualification gained, so to calculate the cost per apprentice place we need to multiply this by the success rate, which was 68% in 2007.

42. This gives an NPV per apprenticeship place in construction of £106,436. A proportion of these benefits would be felt by the apprentice, with a proportion also being accrued by the employer.

Number of apprentices

43. According to Construction Skills UK figures, there are around 15,000 apprentices working in construction in England in 2007/08. They estimate that the economic downturn could lead to a reduction in numbers of 20% this year, which would mean a fall of 3,000.

44. For the purposes of this impact assessment, we will assume that this policy will increase demand to some degree, mitigating the fall as a result of the economic downturn.

45. As a core assumption we will assume that this policy will increase demand for apprenticeships by 4% compared to what is expected to happen in the absence of the policy, but we will also present the figures for 2%, 6% and 7.5% to provide a sensitivity analysis.

46. Under our core assumption, we expect this policy to deliver 480 additional apprentices in construction this year.

Costs

47. The costs of this policy would ordinarily include the cost of tuition for each apprenticeship, plus a measure of the lost productivity to the firm whilst the apprentice is training. The MacIntosh research already includes these costs when calculating the NPV of an apprenticeship qualification, so we do not need to add these separately.

48. Thus the only additional costs to include are the implementation costs of the policy, in terms of the extra admin costs imposed on each new project.

49. As this is to be taken forward on a case by case basis, we do not expect these costs to apply to all public procurements. For the purpose of this Impact Assessment, we are using the upper threshold of what we might expect the costs to be, drawing on the 'Joint Statement on access to Skills, Trade Unions and Advice' impact assessment published in March 2008. This upper threshold assumes that, in all procurements, the extra contract documentation and monitoring will take around 55 hours of management time per contract. Costing this at £20 per hour means that we can assume a cost of £1100 per contract.

50. The OGC figures show that in 2007/08 there were 298 construction projects in total across Government.

51. This means that we can assume the maximum implementation costs for this year will be £327,800. This is at the upper end of the likely scale of implementation costs.

NPV calculations

52. Taking these costs and benefits into consideration, the estimated NPV under our core assumption of a 4% increase in demand is just over £50m. This figure is calculated on the basis of one year, and so can be assumed to be an annual figure.

Table 1 – NPV calculation based on core assumption of 4% increase in demand for apprenticeships

Cost per year	£327,800
Benefits per year	£51,089,107
NPV (per year)	£50,761,307

Sensitivity Analysis

53. If we were to alter the core assumption of a 4% increase in demand, then the NPV would change as shown below. We present the figures for a 2%, 6% and 7.5% increase in demand to show how the calculation would alter, but it is clear that in all cases the NPV is high and positive, showing that the policy should be worthwhile.

54. For further confirmation, we calculate that the policy would need to lead to an increase in demand of just 0.03% in order to break even.

Table 2 – Sensitivity analysis showing NPV assuming a 2% increase in demand for apprenticeships

Cost per year	£327,800
Benefits per year	£25,544,554
NPV (per year)	£25,216,754

Table 3 – Sensitivity analysis showing NPV assuming a 6% increase in demand for apprenticeships

Cost per year	£327,800
Benefits per year	£76,633,661
NPV (per year)	£76,305,861

Table 4 – Sensitivity analysis showing NPV assuming a 7.5% increase in demand for apprenticeships

Cost per year	£327,800
Benefits per year	£95,792,076
NPV (per year)	£95,464,276

Specific Impact Tests

55. We have considered the specific impact tests and have included information on the tests that are relevant to this policy in the evidence base as follows: small firms paragraphs 27 – 33, race equality paragraph 28, disability equality paragraph 28 and gender equality paragraph 28. We do not expect this policy to have any material impact on any of the other areas in the Checklist.

Specific Impact Tests: Checklist

Use the table below to demonstrate how broadly you have considered the potential impacts of your policy options.

Ensure that the results of any tests that impact on the cost-benefit analysis are contained within the main evidence base; other results may be annexed.

Type of testing undertaken	<i>Results in Evidence Base?</i>	<i>Results annexed?</i>
Competition Assessment	No	No
Small Firms Impact Test	Yes	No
Legal Aid	No	No
Sustainable Development	No	No
Carbon Assessment	No	No
Other Environment	No	No
Health Impact Assessment	No	No
Race Equality	Yes	No
Disability Equality	Yes	No
Gender Equality	Yes	No
Human Rights	No	No
Rural Proofing	No	No

Annexes

< Click once and paste, or double click to paste in this style.>