

The Home Energy Efficiency Scheme



This report has been prepared under Section 6 of the National Audit Act 1983 for presentation to the House of Commons in accordance with Section 9 of the Act.

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Executive summary

Background

1 This report examines the efficiency and effectiveness of the Home Energy Efficiency Scheme. The Scheme, which was established by the Social Security Act 1990, and operates in England, Scotland and Wales, provides grants towards the cost of energy efficiency measures in the homes of people on benefits, the disabled, and the over 60s. This report focuses on the period from the start of the Scheme in 1991 to March 1997, during which grants totalling £337 million were paid to 2.1 million households.*

2 The Scheme is intended to increase the take-up of energy efficiency measures in eligible households and, since July 1997, to promote energy efficiency and greater comfort in those households receiving grant. Until July 1997 it also had a secondary objective to increase employment and training in the insulation industry.

3 The Scheme is overseen by the Department of the Environment, Transport and the Regions, although its administration is contracted out to Eaga Limited (referred to as Eaga in this report), a non-profit-distributing private limited company set up specifically to administer the Scheme. Since the Scheme began, to March 1997, Eaga has received fees totalling £23.8 million, excluding Value Added Tax. Individual householders apply for the grant, but the work is carried out by installers who then receive the grant from Eaga after the householder certifies that the work has been done.

The Scheme's effectiveness

Take-up of insulation in eligible households

4 The Department and Eaga have comprehensive information on the pattern of take-up to date but there is less known about the number and nature of households who could still benefit from the Scheme. There are difficulties in estimating that number with any precision. Both Eaga and the National Audit Office broadly estimate that there are around 10 million households who might have benefited or who might still benefit, although not all these households will

* By September 1997 grants totalling £367 million had been paid to 2.34 million households.

want to take up the measures available under the Scheme. By September 1997, over 2.3 million (23 per cent) of these 10 million households have been insulated since the Scheme began.

5 Whilst the Scheme is available to all who meet the qualifying criteria, 20 to 30 per cent of households who have benefited from the Scheme said they would have carried out the work without grant assistance. Reduced grants for the over 60s not receiving benefit, introduced in 1996, may reduce this proportion.

Impact on energy efficiency and increased warmth and comfort

6 In the first six years of the Scheme 73 per cent of grants were provided for draught-proofing, and six per cent for loft insulation, with 21 per cent of grants providing both. Fewer eligible households need loft insulation, and the take-up rates for the two measures both represent about 20 per cent of those households needing such measures. Loft insulation and draught-proofing provided under the Scheme pay for themselves, through potential energy savings, in around three years. Some households take the benefits of the Scheme in increased warmth and comfort rather than reduced energy consumption. From July 1997 a wider range of energy efficiency measures, including cavity wall insulation, has been available under the Scheme.

7 Whilst all of the measures now available under the Scheme are estimated to pay for themselves within about nine years, some measures, such as loft insulation and low-energy lightbulbs, are much more energy efficient than others such as draught-proofing, the benefits of which are felt more as increased comfort. Until July 1997 the householder was given a free choice between all the measures available. Since that date the Scheme does more to limit the householder's choice to those measures which are most energy efficient, but householders remain free to opt for draught-proofing in all cases.

8 When the Scheme was revised in July 1997 the Department introduced energy efficiency targets and better measures of the energy savings being achieved. Eaga now collects sufficient information about the work done on each job to calculate the nominal energy efficiency of the property and the improvement brought about by Scheme measures. The Department is considering the possibility of further research in this area in 1998. The Department has not yet, however, developed measures to assess the greater warmth and comfort which the Scheme provides.

Impact on jobs and training

9 The Scheme has also been successful in creating some 1,600 jobs in installation companies working under the Scheme up to December 1996, whilst, to the end of 1995, the latest period for which data is available, there has been a net reduction of 1,600 jobs in the wider insulation industry. The Scheme has also resulted in the training of around 2,100 people in insulation skills. Since July 1997 increased jobs and training have not been an objective of the Scheme.

The Scheme's efficiency

The contract with Eaga

10 Eaga has administered the Scheme since its inception. The Department re-awarded the contract to Eaga in 1993 and, after taking advice from independent consultants, again in 1996. The 1993 and 1996 contracts were awarded on a single tender basis because the Department wished to maintain a reliable service; suspected a lack of interest by other organisations since Eaga was the only managing agent of any size working in this area; and was concerned that Eaga would charge a higher fee if forced to compete. The Treasury has indicated to the Department that it would expect the scope for introducing competition to be reviewed when the current contract comes up for renewal in 2001.

11 Since the start of the Scheme to March 1997 the Department paid Eaga administration fees totalling some £23.8 million. Between 1991-92 and 1996-97 the fee each year has been in the range of 5.5 to 7.7 per cent of total expenditure on the Scheme.

12 In 1996 the Department considered relating the variable element of Eaga's fee to the number rather than the value of the grants paid, on the grounds that Eaga's costs are driven by the number of applications processed rather than the value of funding, and because the present fee structure could act as a disincentive for Eaga to restrict grant payments below the grant maximum. The Department's assessment was that while this might initially lead to a higher fee, the balance would shift over time. But the Department believed that extra staff resources would be needed to negotiate and implement such a change, and concluded that uncertainties over the future size and structure of the Scheme made the timing inappropriate.

13 Between 1991-92 and 1996-97 Eaga's fees in real terms rose and fell broadly in line with the number of claims, except for 1995-96 when a 39 per cent increase in claim volumes coincided with a 13 per cent rise in fee. By 1996-97 the unit fee per grant in real terms was almost the same as in 1991-92.

14 Since the beginning of the Scheme, to March 1997, Eaga has made operating surpluses, mostly from administering the Scheme, amounting to £4.0 million, representing an average margin of 16 per cent on its operating costs. Including earnings from other sources, interest, and gains and losses from disposal of assets, Eaga's surplus over this period totalled £4.9 million. Of this surplus Eaga paid £1.3 million in taxes and donated £0.55 million to the Eaga Charitable Trust, which it established to fund research and promote energy efficiency and fuel poverty issues. The remaining surplus of £3.0 million is held in Eaga's reserves: £1.3 million in a designated reserve to meet the estimated cost of redundancies should there be any significant reduction in the level of its operations, and to support a diversification strategy aimed at extending Eaga's services to other customers; and the other £1.7 million in a general reserve which is not allocated to any specific purpose. Eaga is not allowed, under its memorandum of association, to distribute its surpluses as dividends. Consultants appointed by the Department in 1995 considered that Eaga's profitability was reasonable.

15 Eaga has consistently met its targets for performance, and the Department has been satisfied with Eaga's administration of the Scheme. With the introduction of changes to the Scheme in 1997, the Department changed and enlarged the scope of Eaga's performance targets, although some gaps remain. Customer satisfaction with the Scheme has been consistently high throughout its life, and there have been very few complaints about its administration.

The selection of installers and allocation of work

16 Installers are first **selected** as meeting the standards required for Scheme work, then after competition **appointed** to provide work in areas around the country, and then **allocated** funds each quarter which sets a limit to the amount of grant-assisted work they can carry out in each area to which they have been appointed.

17 Eaga operates a demanding selection process which seeks to ensure that installers meet the requisite standards. Since December 1995, and in the light of subsequent reviews, Eaga has taken steps to improve the transparency of the system of selection, appointment and allocation, so that installers and other interested parties can be better assured about its fairness. The selection process was independently reviewed in 1996 and found to be fair and even-handed. A

further review in 1997, which was wider in scope, found that Eaga relies heavily on subjective assessment of applicants' information, that judgements were not well documented, and that existing appointees were given greater credence than new applicants unless they had demonstrated poor quality work. We also found that, although separate guidance is provided, the application forms Eaga uses did not help installers provide the information most useful to the area appointment decision, and that in some cases Eaga did not provide installers with complete, accurate and helpful explanations of the reasons for non-appointment. Eaga is taking action to further improve its selection and appointment procedures and documentation. The independent reviews in 1996 and 1997 did not cover the fairness of the separate system for allocating funds (and thus work) to installers.

18 The Department expects the selection and allocation system to ensure fair and open competition, to maximise the work done and to ensure the best deal for the taxpayer. In March 1997 nearly 200 firms had demonstrated that they were capable of meeting Eaga's technical standards, and of these around 160 had been allocated funds under the Scheme. There has been a regular movement of firms on to and off the list of installers which meet Eaga's standards. For the allocation of funds and work to installers, Eaga divides the country into 156 areas, and is expected to appoint two or more installers to each area to provide competition and consumer choice. In March 1997 there were 390 separate area appointments, and only a few remote areas had a single installer appointed to do Scheme work.

19 Prior to the revision to the Scheme coming into force from July 1997, the selection of installers was based on a number of factors, primarily their financial viability and technical quality, whilst the allocation of funds was based largely on the installer's record in spending up to the maximum of previous allocations. Installer prices or costs were not a primary determinant in selection or allocation, coming into play on rare occasions when the technical quality and spending records of installers were equal. The Department asked Eaga to give more weight to price in appointing installers to operate from July 1997.

The time taken to get work done and to pay claims

20 Waiting times for households, between expressing an interest and the work being done, have varied between six and 30 weeks. These times are beyond Eaga's control since they are caused by demand exceeding the funds made available by Parliament and the Department, and by changes in entitlement which bring surges in demand. For example, in 1996-97 the waiting time reached 30 weeks because of a surge in interest in early 1996 from over 60s whose eligibility was about to be

reduced. Eaga has met its targets for the time to process and pay claims. In 1996-97, installers were paid in an average of nine calendar days, and 99 per cent were paid within 21 calendar days.

The cost of work done under the Scheme

21 The grant maxima and average grant payment for each type of work under the Scheme before July 1997, taking the last two years together, are comparable with the cost of similar work done for the electricity companies. But while the average cost of work done for the electricity companies has decreased over the two years, the cost of work done under the Scheme has remained the same for draught-proofing, and has increased for loft insulation. In 1996-97 the cost of loft insulation under the Scheme was around £20 higher than the cost of work done for electricity companies and the grant maximum, with this excess cost being borne by householders, installers, or third parties such as local authorities. The changes to the Scheme introduced in July 1997 have had little impact on the average cost of draught-proofing work. But the average cost claimed by installers for loft insulation work has increased by 40 per cent. This increase is likely to be due to both a change in specifications, and to raising the maximum grant available for this measure from £199 to £315, which has allowed the grant to cover the higher cost of loft insulation in larger properties.

22 Eaga considers that it may not have the legal authority to reduce or amend installer claims on the grounds of cost, although in practice it has sought to challenge some installers regarding the cost of their claims. Under new arrangements and regulations operating from July 1997, Eaga's power to amend or reduce claims is now clearer. Since November 1996 Eaga has collected more information on which to assess the reasonableness of the work done and the grant claimed. And since the Scheme was revised in July 1997, Eaga has been in a stronger position to exert control over the cost of claims both during the registration process, now that installers are required to provide more detailed price and volume information; and when claims are processed for payment, through the automatic checks that are carried out on installers' costs in comparison with the rates agreed at the time of registration.

23 There is wide variation in the value of claims submitted by installers, much of which is explained by the size, type and location of property. However, there were variations unlikely to be explained by these factors, the reasons for which could only be resolved by physical inspection of the property to assess the reasonableness of the work done. The new cost controls introduced in July 1997 should reduce the variability of claims, although they will not routinely identify all claims where the work done was unnecessary or excessive.

The quality of insulation work

24 The Department requires Eaga to inspect each year five per cent of jobs for which claims have been submitted. The quality of work done has been improving. In 1991-92 Eaga's inspectors found faults in 42 per cent of jobs inspected, but by 1996-97 this had fallen to 13 per cent of the jobs inspected. The majority of faults identified are minor and, overall, jobs complied with 99.6 per cent of Eaga's quality criteria. Only a very small percentage of failures result in a risk to health and safety. In 1996-97 Eaga estimates that some 0.1 per cent of all jobs (575 jobs) could lead to a potential hazard, and over the life of the Scheme there have been no reports of any such incidents resulting from work done under the Scheme.

25 Eaga does not identify the impact that sub-standard work may have on the energy efficiency of a property. Whilst recognising that the same fault can have a different impact in different properties, the National Audit Office estimated that around 25,000 jobs (six per cent) in 1996-97 would be subject to weaknesses which could have an impact on the energy efficiency obtained. Eaga's own audits of its inspections found that around nine per cent of inspections could have been more rigorous. There was also significant variation in how long it took inspectors to check that faults had been rectified.

Main conclusions and recommendations

26 The Scheme has clearly been effective in increasing the take-up of energy efficiency measures in eligible households and it is likely that there will be continuing demand for the Scheme for some years. Much of the Scheme's benefit has been taken as increased warmth and comfort, but recent changes to the Scheme should increase the energy savings achieved by the Scheme, and improve the measurement of those savings and benefits in greater warmth and comfort. The Scheme has also contributed to reduced carbon dioxide emissions. In addition, the Scheme has succeeded in creating some 1,600 jobs. Job creation was a secondary objective of the Scheme until July 1997.

27 Eaga's administration of the Scheme has been good, particularly on improving the quality of work done by installers, and on the efficient processing of claims. Eaga has also taken a prominent role in liaising with the insulation industry and promoting good practice within the industry. However, whilst the costs of work done under the Scheme are broadly comparable to the costs in similar schemes, Eaga could put more emphasis on cost control both in selecting and allocating funds to installers, and in reviewing the reasonableness of claims

submitted by installers. And the Department might do more to ensure that the surpluses made by Eaga on Scheme work are reasonable in view of the lack of competition when the contract was placed.

28 There is thus scope for further improving the Scheme. The National Audit Office makes a number of recommendations, as follows:

On forecasting demand and targeting effort

29 The Department and Eaga could carry out surveys, perhaps annually and regionally, to provide better estimates of the number of households who remain or wish to benefit from the Scheme. The results might also inform decisions about whether the Scheme could be targeted more effectively, on particular areas or types of householders where greater take-up would be desirable.

On maximising effectiveness and monitoring impact

30 Whilst the choice of measure is left to the householder, the Department and Eaga should consider what could be done to promote take-up of those measures available under the new Scheme which provide the greatest energy efficiency, so that the benefits of the Scheme are maximised. This might be done by leaflets which make plain the relative merits of the different measures, and could supplement the optional energy advice currently provided by installers. The Department might usefully extend the surveys recommended above to collect data on householders' perceptions of the increased warmth and comfort which resulted from the insulation measures provided under the Scheme.

On the contract with Eaga

31 The Department might consider what more might be done to draw on or generate more competition for Eaga, in the run up to renewal of the contract in 2001, and explore the scope for introducing further performance indicators to obtain a broader and better assessment of Eaga's administration of the Scheme.

On Eaga's fees and surpluses

32 The current contract does not include any provision for revisions to fees other than in exceptional circumstances. However, the Department might consider whether voluntary re-negotiation of a simpler fee structure is possible based on a unit cost of administration less an annual deflator, rather than the current structure involving fixed and variable elements. The Department should also look again at what constitutes a reasonable profit for Eaga on Scheme work, and ensure

that Eaga's fee structure does not result in unreasonable surpluses, in view of the absence of competition when the contract was last awarded, and take the profitability of the contract into account in subsequent negotiations of fees. For example, any re-negotiated contract could allow for the Exchequer to receive an agreed proportion of any annual surplus above a predetermined threshold.

On introducing more competition between installers

33 Eaga and the Department should consider the scope for introducing more competition and giving price greater prominence in the selection of installers and the allocation of work; for example, by allowing more installers to apply for vacancies as they arise and by allocating most work to those installers whose bid prices are lowest. In the first instance, this might be done on an experimental basis, to see whether it leads to lower cost without detriment to the quality of work done. Reviews of the fairness of the selection process should be expanded to include the allocation of work to installers.

On controlling the cost of claims

34 The Department should clarify Eaga's legal powers to reduce or amend the cost of claims submitted by installers, and ensure that Eaga has an explicit responsibility to control the cost of claims. Eaga should also explore further the scope to identify costs which warrant further examination, both when assessing installers' rates for work when they apply for appointment and when checking claims for payment. Eaga could apply some of its inspection effort, which is currently based on a random sample, to focus on claims or installers whose costs appear significantly out of line with what might be expected. Eaga might also consider whether analysis of the variation in costs could help direct more work to those installers with consistently lower costs.

On the technical quality of work done

35 The Department might consider whether the level of routine inspection it requires is warranted, given the improvement in quality achieved since the Scheme began. Eaga might also investigate the scope for combining a smaller random sample, to give assurance about the Scheme as a whole, with a programme of inspections targeted on work or on specific installers assessed to be most at risk of non-compliance with its standards. Eaga should ensure that inspections are carried out and followed up with greater rigour.

Part 1: Background

Introduction

1.1 The Home Energy Efficiency Scheme (the Scheme) provides grants to cover the cost of installing insulation and other energy efficiency measures in the homes of people on benefit, the disabled, or aged 60 or over. The Scheme is intended primarily to increase the take-up of insulation in eligible households and to promote energy efficiency and greater comfort in those households receiving grant; and until July 1997 it also had a secondary objective to increase employment and training in the insulation industry. The Scheme was established by the Social Security Act 1990 and started operation in January 1991, being originally overseen by the Department of Energy. In April 1992 oversight was transferred to the Department of the Environment which in June 1997 became the Department of the Environment, Transport and the Regions.

The Scheme's main features

- 1.2** The main features of the Scheme, and the main changes to them, are:
- Until July 1997, the Scheme provided grants of up to £305, paid to appointed installers, towards the cost of providing loft insulation and draught-proofing in the homes of those in receipt of certain benefits (see Box). A client contribution of £16 was abolished in 1993. An additional grant of £10 was paid to installers to provide energy efficiency advice, which is available to all who receive energy efficiency measures under the Scheme. Both before and after July 1997, any cost in excess of the maximum grant has had to be met by the householder. Experience to date has shown that in many cases these excess costs have been borne by the installer or by a third party such as a local authority where they are the landlord. Individual householders apply for the grant, but the installers who carry out the work receive the grant after the householder certifies that the work has been done.

Benefits which entitle householders to receive grant under the Scheme

■ Family credit	■ Housing benefit
■ Income support	■ Disability working allowance
■ Council tax benefit	■ Disability living allowance
■ Income-based jobseekers' allowance	■ Attendance allowance
■ War disablement pension, together with a mobility supplement or constant attendance allowance	■ Industrial injuries disablement benefit, which must include constant attendance allowance

- In 1994, eligibility for a full grant was extended to the over 60s and the disabled. From April 1996 over 60s not in receipt of the relevant benefits had their grant reduced to a maximum of 25 per cent of the full grant, although all those over 60s who registered before the end of March 1996 are allowed to have the work carried out under the earlier rules.
- Since July 1997, the Scheme has been expanded to include a wider range of measures including cavity wall insulation (Figure 1). The maximum grant has remained at £315, with energy advice no longer paid for separately.

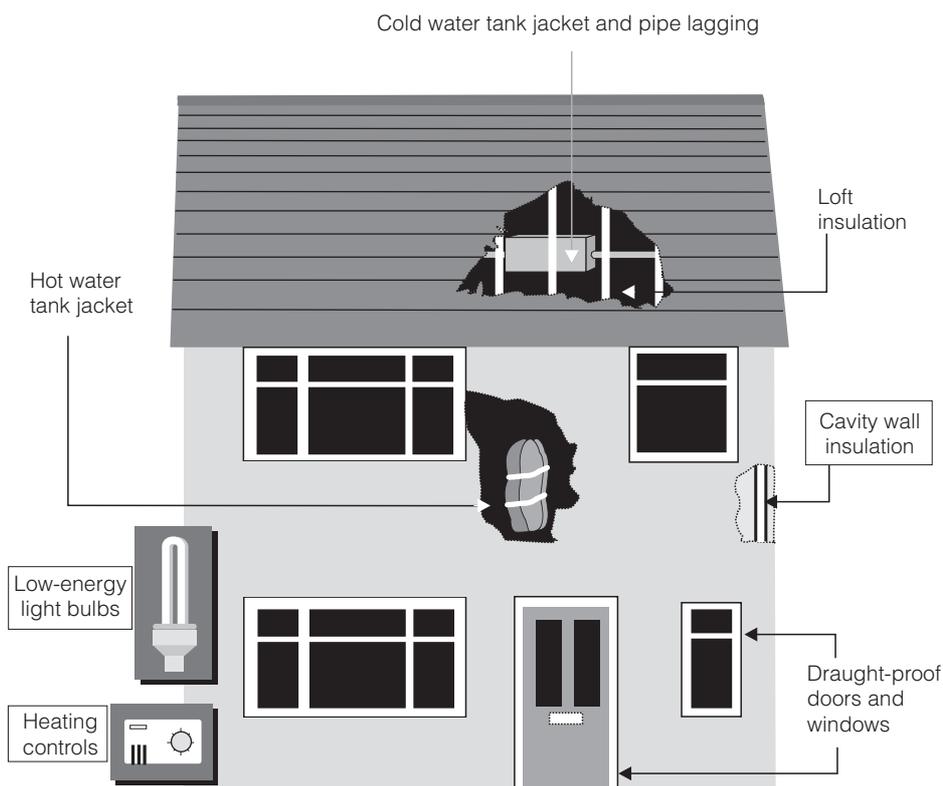
Appendix 1 shows the different measures available and rates payable under the Scheme.

1.3 Grants paid to installers carrying out work in individual households account for the vast majority of claims and grants paid under the Scheme. In addition, eligible householders who wish to carry out such work themselves may apply for a “Materials Only” grant, up to a maximum under the new Scheme of £160 (or a maximum of £40 for those over 60 who are not on benefit). Materials Only grants accounted for only 0.4 per cent of the total number and some 0.3 per cent of the value of grants paid in 1996-97. Prior to July 1997 installers could also claim a “Building in Multiple Occupation” grant for work carried out in buildings which were occupied by a number of people at individual addresses but where no one householder had any individual responsibility for the lofts or communal areas. In 1996-97 such grants accounted for less than 0.1 per cent of the number and 0.4 per cent of the value of grants paid.

Measures available under the Scheme

Figure 1

Measures shown in boxes have become available since July 1997



Source: National Audit Office

Changes in July 1997 extended the Scheme to cover a wider range of energy efficiency measures.

Trends in expenditure and the number of grants

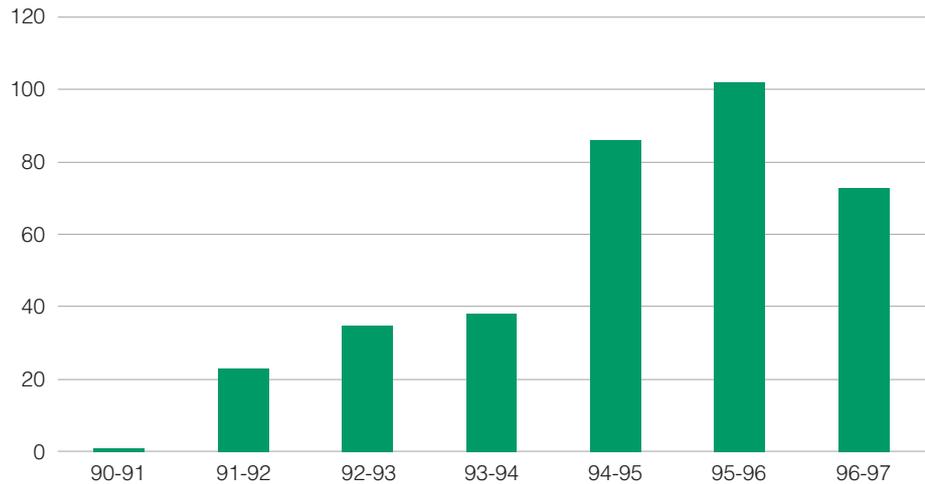
1.4 The Scheme is cash-limited, based on sums provided each year by Parliament to the Department of the Environment, Transport and the Regions. In the six years since the Scheme began, grants totalling £337 million have been paid (£354 million in 1996-97 prices)*. The value of grants paid increased in each of the first five years, particularly in 1994-95 after the Scheme was extended to all over 60s and the disabled. In 1995-96 it totalled some £100 million (£102 million in 1996-97 prices). In 1996-97, the value of grants paid was reduced to £68 million, after April 1996 when the eligibility of the over 60s for a full grant was limited to those in receipt of certain state benefits (Figure 2).

* By September 1997 grants totalling £367 million had been paid.

Grant expenditure in the period 1990-91 to 1996-97, at 1996-97 prices

Figure 2

Expenditure (£ million)



Note: Expenditure in 1990-91 was for three months only

Expenditure rose each year until 1996-97 when there was a 30 per cent reduction in funding and a change in the entitlement of the over 60s.

Source: National Audit Office

1.5 In the period January 1991 (when the Scheme began) to March 1997 over 2.1 million householders received grants for insulation of their homes'. The number of grants each year has followed broadly the trend in expenditure, with a peak in 1995-96 when 620,000 grants were paid. Following changes to the eligibility rules in April 1996, the number of grants fell to 415,000 in 1996-97. Around 80 per cent of all grants have been made towards the insulation of homes of people on benefits (Figure 3). Following reductions in April 1996 in the grant payable to over 60s not on benefit, by the autumn of 1997 over 60s not on benefit accounted for just five per cent of new claims.

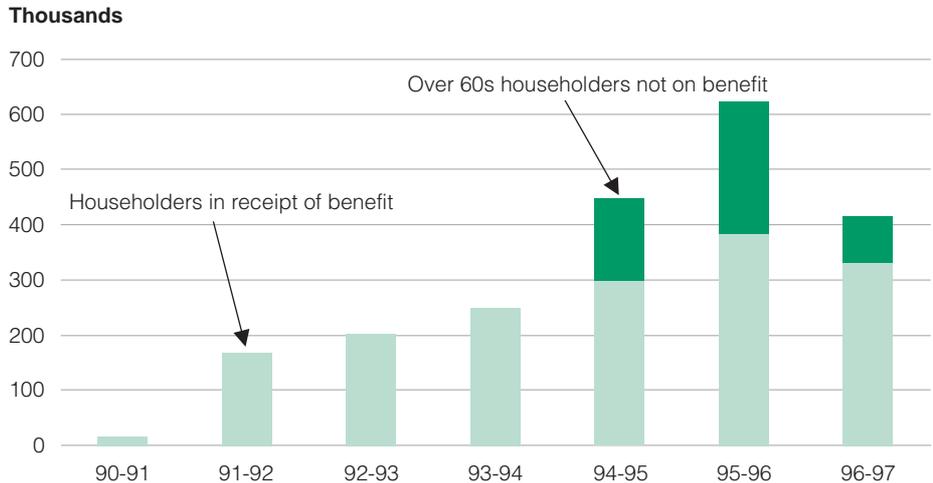
Roles and responsibilities

1.6 Figure 4 shows the relationships between the key players in the operation of the Scheme.

* By September 1997 2.34 million households had received grants.

Number of grants paid in the period 1990-91 to 1996-97

Figure 3



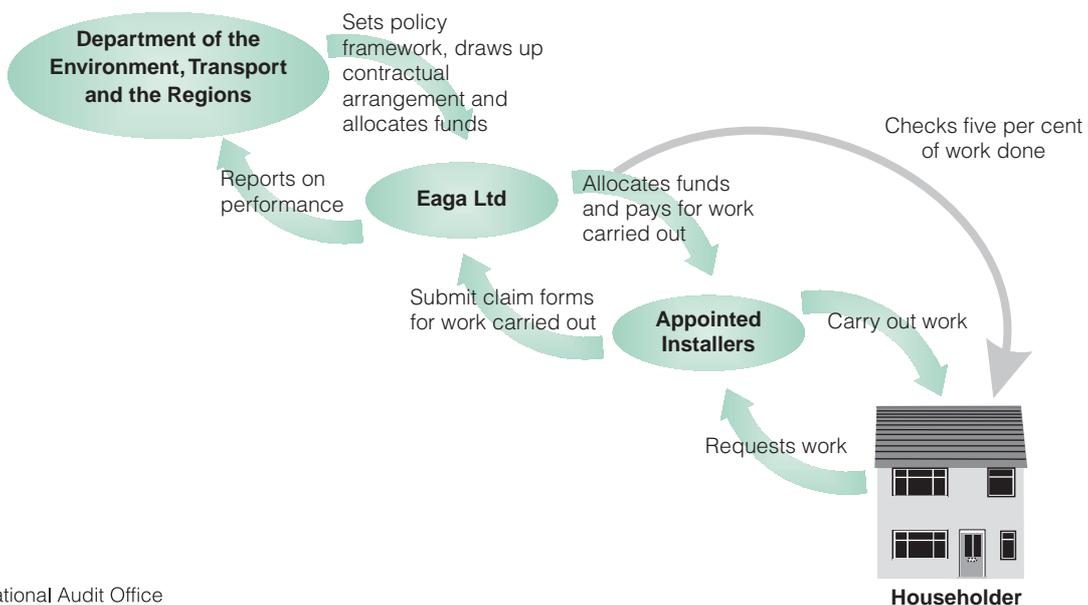
Note: Householders are only required to declare one reason for eligibility, although they may be in receipt of benefit and over 60. Those over 60 can claim the larger grant by declaring one of their benefits. Eaga estimates that one-third of over 60s are in receipt of benefits and the division in the type of recipients shown reflects this.

The total number of grants rose each year until 1996-97 when there was a fall of 33 per cent. In 1994-95 and 1995-96 more than a third of grants were paid to the over 60s, but this fell to 20 per cent in 1996-97 when their eligibility for grant was reduced. This figure includes those householders who registered before the end of March 1996, who are allowed to have the work carried out under the earlier rules.

Source: National Audit Office

Figure 4

The key players in the Home Energy Efficiency Scheme



Source: National Audit Office

Eaga operates the Scheme on behalf of the Department. Installers carry out the work on behalf of the householder, and claim grant from Eaga when the work is done.

1.7 The **Department of the Environment, Transport and the Regions** is responsible for setting the policy framework, allocating funding to the Scheme and monitoring the achievement of the Scheme's objectives. Under the Social Security Act 1990, the Secretary of State has powers to delegate his functions in respect of grants under the Scheme, and to pay fees for carrying out these functions. Details are set out in Appendix 2. The Department has contracted administration of the Scheme to Eaga Limited.

1.8 **Eaga Limited** (formerly the Energy Action Grants Agency Limited) has administered the Scheme since its inception in January 1991, and at March 1997 employed some 120 staff operating the Scheme. Between October 1990 and March 1997 Eaga received total fees of some £23.8 million for administering the Scheme. Eaga is an independent non-profit-distributing company limited by guarantee, which was established in 1990 specifically for this purpose by the national energy efficiency charity NEA (formerly Neighbourhood Energy Action). NEA campaigns for warmer homes, aiming to reduce fuel bills and increase comfort for the poorest households, and has extensive contacts with installers working in the Scheme, over 90 per cent of whom are NEA members. Eaga Limited states its aim as providing meaningful and sustainable employment in the North East, from where it operates and to set the standards for work in its sector. Eaga Limited ("Eaga" in the rest of this report) is responsible for:

- setting up and maintaining a network of registered installers;
- allocating funding to installers each quarter on the basis of an assessment of past quality of service delivery and effectiveness of fund utilisation;
- assessing and verifying eligibility of grant applicants;
- processing and paying claims from installers or individuals;
- ensuring compliance with Scheme regulations and Departmental guidance;
- setting and monitoring technical and quality standards, including the type and quality of materials;
- de-registering installers where necessary; and
- providing basic advice to households on the economic and efficient use of energy under the Scheme.

1.9 Eaga has divided the country into 156 geographical areas for which one or more **installers** may be appointed. In March 1997 there were 390 installer appointments, held by 164 separate companies, who are responsible for:

- marketing the Scheme to eligible households;
- carrying out loft insulation, draught-proofing and other insulation and energy efficiency work;
- providing energy advice to recipient households on request; and
- submitting claims to Eaga against the work carried out.

1.10 The **householder** and, where appropriate, the landlord are required to agree to the work being carried out before it commences. Although it is the householder who applies for the grant, the installer submits the claim form and receives payment of the grant from Eaga after the householder confirms that the agreed work has been completed.

Recent changes

1.11 In March 1996, the Department issued a consultation paper “Home Energy Efficiency Scheme: Proposals for Change”. The Department received responses from a wide range of organisations and in December 1996 Ministers announced changes to the Scheme which took effect from July 1997. The main views expressed by those responding, and the extent to which they have been taken on board in the design of the new Scheme, are summarised in Appendix 3.

1.12 From July 1997 the objective of securing better energy efficiency in low income and elderly households has been given greater recognition than before. In addition, the range of measures available was increased to include cavity wall insulation, heating controls and energy efficient lamps. But whereas under the previous Scheme eligible households could choose both loft insulation and draught-proofing where these were needed, from July 1997 households have had to choose one of four main energy saving measures (see Appendix 1). The grant maximum of £315 has been retained but separate grant maxima for different measures have been removed. The Department also introduced targets for the energy savings to be achieved by the Scheme and energy rating techniques to monitor the Scheme’s performance. The Scheme no longer has its secondary objective relating to employment and training in the insulation industry.

1.13 In his pre-Budget Statement on 25 November 1997, the Chancellor of the Exchequer announced that Value Added Tax on the installation of energy saving materials under existing grant schemes, such as the Home Energy Efficiency Scheme, will be cut from 17.5 per cent to five per cent in the Spring Budget of 1998. This reduction means that the funds under the Scheme will go further; and the Department estimates that it will help to insulate an additional 40,000 homes per year.

1.14 In autumn 1997 Ministers set up a group of senior officials, representing the Departments of Environment, Transport and the Regions, Health, Trade and Industry and Social Security, together with Treasury and the Scottish, Welsh and Northern Ireland Offices, to consider the issue of fuel poverty. In particular, the group will look at ways of defining the issue to take account of social exclusion and health impacts, and the extent to which existing policies, including the Home Energy Efficiency Scheme, address them.

The National Audit Office review: scope, issues and methodology

1.15 The National Audit Office's review covered the operation of the Scheme in England, Scotland and Wales but did not include a similar scheme for Northern Ireland known as the Domestic Energy Efficiency Scheme. It did not cover "Materials Only" grants or Building In Multiple Occupation grants (see paragraph 1.3), in view of the relatively small amounts spent on them. Our examination focused on the operation of the Scheme up to March 1997, though it also takes account of the changes that took effect in July 1997. The National Audit Office does not have a statutory right of access to Eaga's papers and records, but Eaga's contract requires it to make all such material available to us for the purpose of an audit of the Scheme. Eaga has co-operated fully with our examination.

1.16 The focus of the review was:

- **the Scheme's effectiveness:** whether the Scheme has achieved its objectives (Part 2 of this report); and
- **efficiency of the Scheme:** whether the design and administration of the Scheme has led to the provision of loft insulation, draught-proofing and energy advice in the most efficient manner (Part 3).

The issues and key questions covered by the examination, and where in the report they are addressed, are shown in Figure 5.

Figure 5

The issues and key questions addressed by the National Audit Office

Issue	Key Questions	Report Paragraphs
Whether the Scheme has achieved its objectives and the wider energy efficiency and social benefits it was intended to produce.	On increasing take-up in low income households:	
	■ Has the Scheme increased take-up of insulation in eligible households?	2.3-2.5
	■ What is the scope for future take-up by eligible households?	2.6-2.10
	On the contribution to improved energy efficiency and social benefits:	
	■ Has the Scheme led to energy savings and greater comfort commensurate with costs?	2.11-2.18
	On the Department's monitoring of the Scheme's achievements:	
	■ Is the Department's monitoring of the Scheme's future impact sufficient?	2.19-2.21
	On jobs and training in the insulation industry:	
	■ Has the Scheme increased jobs and training in the insulation industry?	2.22-2.26
	Whether the design and administration of the Scheme has led to the provision of loft insulation, draught-proofing and energy advice in the most efficient manner.	On the award of the administration contract to Eaga:
■ Was the contract awarded after fair and open competition?		3.2-3.5
■ Is the administration fee reasonable?		3.6-3.16
■ Is the Department's monitoring of Eaga's performance adequate?		3.17-3.18
On the selection of installers and the allocation of work:		
■ Does the selection process provide appropriate safeguards against the appointment of installers not able to meet the standards of the Scheme?		3.19-3.22
■ Is the registration system fair?		3.24-3.29
■ Does the registration system encourage fair and open competition?		3.30-3.33
On the de-registration of installers:		
■ Is there an effective mechanism to de-register installers not able to comply with conditions of appointment?		3.34-3.35

continued...

Figure 5

continued ...

Issue	Key Questions	Report Paragraphs
Whether the design and administration of the Scheme has led to the provision of loft insulation, draught-proofing and energy advice in the most efficient manner continued...	On checks on eligibility:	
	■ Are there adequate checks on the eligibility of households before work is carried out?	3.36-3.37
	On the timeliness of work:	
	■ Is the time households have to wait for work to be done reasonable?	3.38-3.39
	■ Are installers paid promptly?	3.40
	On the reasonableness of work done, and its cost:	
	■ On what basis is the grant level set, and are the costs claimed by installers in line with market rates?	3.41-3.44
	■ Does Eaga exert adequate control over the cost of claims?	3.45-3.50
	■ Are there variations in the cost of claims submitted by installers and are they investigated?	3.51-3.57
	On the technical quality of work done:	
	■ Is Eaga's monitoring of the quality of work done adequate, and what does it reveal about the quality of work done?	3.58-3.65
	On households' satisfaction with the Scheme:	
	■ Are eligible households satisfied with Eaga's administration of the Scheme?	3.66-3.67
	■ How are complaints dealt with?	3.68-3.70
On comparison with similar schemes:		
■ How does the Scheme compare with those operated by the electricity companies and local authorities?	3.71-3.73	

Source: National Audit Office

The National Audit Office addressed two main issues and a number of subsidiary questions concerning the Scheme's operation and effectiveness.

1.17 The National Audit Office methodology for this study included a review of Eaga’s and the Department’s records; an extensive analysis of Eaga’s database of all grants paid since 1991, with special attention to grants paid in 1995-96 and 1996-97; an examination of claims submitted by installers for work done; surveys of installers participating in the Scheme; and interviews with representatives of organisations associated with or interested in the Scheme. The Office also surveyed practices and experience in similar home insulation schemes operated by the electricity companies. Details of the Office’s methodology are shown in Appendix 4. The National Audit Office was also advised by a panel with expertise in the various aspects of the provision of energy efficiency measures in domestic properties. The members of this panel are shown in Figure 6.

Members of the advisory panel

Figure 6

Name	Organisation
Brenda Boardman	PowerGen Fellow in Energy Efficiency, Environmental Change Unit, Oxford University
Trish Brady	Head of Development, NEA
Tim Bullock	Buildings Adviser, Care and Repair England
Sandra Hutton	Social Policy Research Unit, University of York
Richard Moores	Draught-proofing Advisory Association Ltd
Jerry Robson	National Association of Loft Insulation Contractors

Source: National Audit Office

The National Audit Office was advised by a panel with expertise in various aspects of the provision of domestic energy efficiency measures.

Part 2: Achievement of energy savings and improved comfort

Introduction

2.1 This section of the report examines the achievements of the Scheme against its objectives. When the Scheme began in 1991 its objectives were:

- primarily, to increase the take-up of insulation in low income households, and
- secondly, to increase jobs and the training of staff in insulation services.

2.2 Since it began, however, the Department has recognised that the Scheme also delivers energy efficiency benefits, such as potential reductions in fuel bills, and increased comfort and warmth for households. These other benefits were made more explicit in the changes to the Scheme in July 1997, when the Scheme's objective was redefined as "to secure better standards of energy efficiency, thus reducing fuel costs and increasing comfort, where needed in the homes of elderly, poor and disabled people". At the same time, the Scheme's secondary objective relating to jobs and training was dropped.

Increased take-up of insulation measures

Take-up by eligible households

2.3 Since the Scheme began in 1991, no targets or forecasts have been set for the number or proportion of eligible households to be assisted. Nonetheless, the Scheme has clearly achieved its unquantified objective of increasing the take-up of loft insulation and draught-proofing amongst eligible households. Between January 1991 and March 1997 over 2.1 million eligible households benefited from the Scheme, comprising 1.67 million households on benefit and 0.47 million over 60s households not on benefit (Figure 7). By September 1997 some 2.34 million households had benefited from the Scheme.

Take-up of the Scheme, by type of measure and type of household, 1991-97

Figure 7

Type of grant/measure	Households in receipt of benefit (000s)	Over 60s households not in receipt of benefit (000s)	Total (000s)
Draught-proofing	1,214	341	1,555
Loft insulation	100	28	128
Draught-proofing and loft insulation	349	98	447
Total	1,663	467	2,130

- Notes: 1. The percentage of jobs done with which energy advice was included has risen from 46 per cent in 1991-92 to 82 per cent in 1996-97.
2. Eaga estimates that one third of over 60s are in receipt of benefits, although they need not have stated this when applying, and the breakdown above reflects this.

Source: Eaga
Of the 2.1 million households receiving grant to March 1997, over three quarters were households in receipt of benefit.

2.4 The high level of interest in the Scheme has meant that to date in each year except one (1992-93) the funds allocated to the Scheme have been fully used; in some years the Scheme has been given extra funds released from other Departmental programmes which were underspent, and those extra funds were also fully spent; and in most years some households have had to wait until the next year's funds became available before installation could proceed.

2.5 With all grant schemes there is a risk that grant may be paid for work or activities which would have gone ahead without grant. However, eligibility under this Scheme is automatic for all those households in the qualifying groups who do not already have insulation or other energy efficiency measures, and it has never been part of the Scheme's design that award of grant be dependent upon the householder's preparedness or inability to pay for the measures from their own funds. Surveys in 1993 and 1996 by the Building Research Establishment (a government research establishment which was privatised in 1997) found that 20 to 30 per cent of households which had benefited from the Scheme said they would have had the work done without the grant. However, it is thought that the reduced grant rates for over 60s not receiving benefit, which were introduced in 1996, may have reduced the risk of grant being paid to households which do not need such assistance.

Scope for further take-up amongst the qualifying groups

2.6 The Scheme has, therefore, been effective in increasing the take-up of loft insulation and draught-proofing amongst eligible households. The Department and Eaga have comprehensive information about which households have benefited from the Scheme to date and the measures that have been installed. However, less is known about how many households remain eligible to benefit and which measures they might need or wish to receive. Such information is important to an understanding of whether the Scheme will continue to be effective, and how such continued effectiveness might best be secured.

2.7 Eaga told the National Audit Office that it had attempted to estimate the extent of take-up amongst eligible households (that is, those without energy efficiency measures) in the two qualifying groups, but had felt its estimate of approximately 10 million to be unreliable in view of the number and type of assumptions that had to be built into the analysis. We therefore carried out a separate analysis of the number of eligible households. The National Audit Office found that, as a broad estimate, there was a minimum of 10.4 million households eligible for Scheme grants during the period 1991 to 1997. The Office's methodology for this analysis is set out in Appendix 5.

2.8 Thus, the 2.1 million households receiving grant under the Scheme to March 1997 represent around 20 per cent of the 10.4 million households in need of energy efficiency measures. The Scheme has been taken up by 26 per cent of eligible households on benefit, and by 11 per cent of eligible over 60s households not on benefit. For both groups, the rate of take-up has been about four per cent of eligible households for each year the Scheme has been available to them. Of these 2.1 million households who received grants in the first six years of the Scheme, 73 per cent of grants were for draught-proofing, six per cent were for loft insulation, and 21 per cent were for both. Two million households have benefited from draught-proofing, compared with 0.575 million receiving loft insulation. However, these figures reflect similar take-up rates, at around 20 per cent of the eligible households previously without each measure.

2.9 This analysis suggests, in broad terms, that in March 1997 there were at least 8.3 million eligible households which had not yet taken up the Scheme's benefits, comprising 4.5 million households on benefit and 3.8 million over 60s households not on benefit. In addition, there may also be households who qualify from July 1997 because of the extension of the Scheme to include other energy efficiency measures (for example, those who have themselves installed loft insulation and draught-proofing, but who do not have cavity wall insulation). Of

these 8.3 million or more households, the National Audit Office estimated that around 90,000 will have already received similar energy efficiency measures under schemes operated by the electricity companies.

2.10 These are broad estimates, drawn from a variety of sources. In particular, they assume that all those households in the qualifying groups without these energy efficiency measures will want to take up the benefits offered by the Scheme, which may not be the case. However, Eaga and the Department have not done work to assess the degree to which this is likely to be a factor. Nor has work been done to assess whether the Scheme has achieved similar levels of take-up amongst all those who are eligible to benefit from it, say by region or type of household.

Conclusion and recommendation

It is likely that there will be continuing demand for the Scheme for some years. The Department and Eaga could carry out surveys, perhaps annually and regionally, to provide better estimates of the number of households who remain or wish to benefit from the Scheme. The results might also inform decisions about whether the Scheme could be targeted more effectively, on particular areas or types of householders where greater take-up would be desirable.

Contribution to energy efficiency and greater warmth and comfort

2.11 The Department has recognised the Scheme's wider impact in terms of improving the energy efficiency of properties and increasing the comfort and warmth for householders (see paragraph 2.2). Since July 1997, these have become more explicit goals for the Scheme.

2.12 In 1992 the Department commissioned the Building Research Establishment to produce an interim evaluation of the Scheme based on a sample of jobs done in the period May to September 1991, to examine, amongst other things:

- the energy efficiency benefits achieved; and
- any non-energy benefits such as improvements to the condition of the property and the quality of life of the occupants.

2.13 In its report, published in 1993, the Establishment found no significant difference in the energy efficiency benefits available to households in receipt of loft insulation, draught-proofing, or both, whether they received energy advice or not. It found that the Scheme's insulation measures provided an average potential fuel saving of £39 per household per year, compared to an average grant payment of £140. On this basis the measures would pay for themselves in some three and a half years. However, around 80 per cent of this potential energy saving was taken as increased comfort (through warmer houses) rather than as the full amount of

fuel savings on offer. The actual fuel savings based on fuel bill data were calculated to be £9 per household per year. Householders' estimates were £7 per year. In addition the study also found a reduction in condensation problems. Based on the actual savings taken, the Building Research Establishment estimated that there was also an average reduction of 0.14 tonnes of carbon dioxide emissions per property per year.

2.14 In 1996 Eaga commissioned a further study by the Building Research Establishment. The study suffered from a lack of accurate fuel bill data, because of difficulties in obtaining such information from electricity companies, and therefore relied to a large extent on estimated data. On the basis of this estimated data the study concluded that there was a net potential energy saving of around 15 per cent of fuel bills, representing between £45 and £101 per household per year, depending on the type of heating in the property, but that 50 per cent of this potential saving was taken in increased warmth. Analysis of the results from the 21 properties for which accurate fuel bill data was available found that those households took only some four per cent of potential fuel savings as increased warmth, apparently contradicting the 1993 findings as to the level of savings taken as comfort. However, the 1993 study involved only households on benefit, whereas the 1996 study included over 60s households as well.

2.15 The Building Research Establishment also estimated the average annual fuel savings for each type of measure under the Scheme and concluded that loft insulation achieved higher savings (£71 per year) than draught-proofing (£36 per year). The National Audit Office calculated, on the basis of these figures, that loft insulation provided by the Scheme pays for itself on average after two and a half to three years, whilst draught-proofing pays for itself in just over three years. These payback periods can vary depending on the type of property. The payback can take the form of savings in fuel bills or increased warmth and comfort for which people are prepared to pay (implying that they are valued at least as highly as the energy savings foregone) (Figure 8).

2.16 As part of their 1996 evaluation of the Scheme the Building Research Establishment also asked households about their perceptions of the measures' effect on the level of warmth and comfort in their homes. Sixty five per cent of households felt their homes were warmer and 79 per cent felt they were less draughty.

Payback periods for loft insulation and draught-proofing provided under the Scheme, based on data from the Building Research Establishment's evaluation of the Scheme in 1996

Figure 8

	Annual potential energy savings (£)	Average grant payment ¹ (£)	Average cost of claim (£)	Average payback period ² (years)
Loft insulation	71	185	219	2.6 / 3.1
Draught-proofing	36	114	117	3.2 / 3.3

Notes: 1. The average grant payment was derived from the National Audit Office's analysis of Eaga's 1996-97 claims database, not from the Building Research Establishment report which did not include such data by individual measure.

2. The payback periods for Scheme measures are calculated using both the average grant and the average claim value. The difference is caused by the fact that the cost of work done exceeds the maximum grant; where this is so, the extra cost is met by the householder, the installer or a third party such as a local authority.

3. Figures relate to jobs where loft insulation or draught-proofing only were installed.

Loft insulation pays for itself in 2 to 3 years; draught-proofing pays for itself in just over 3 years.

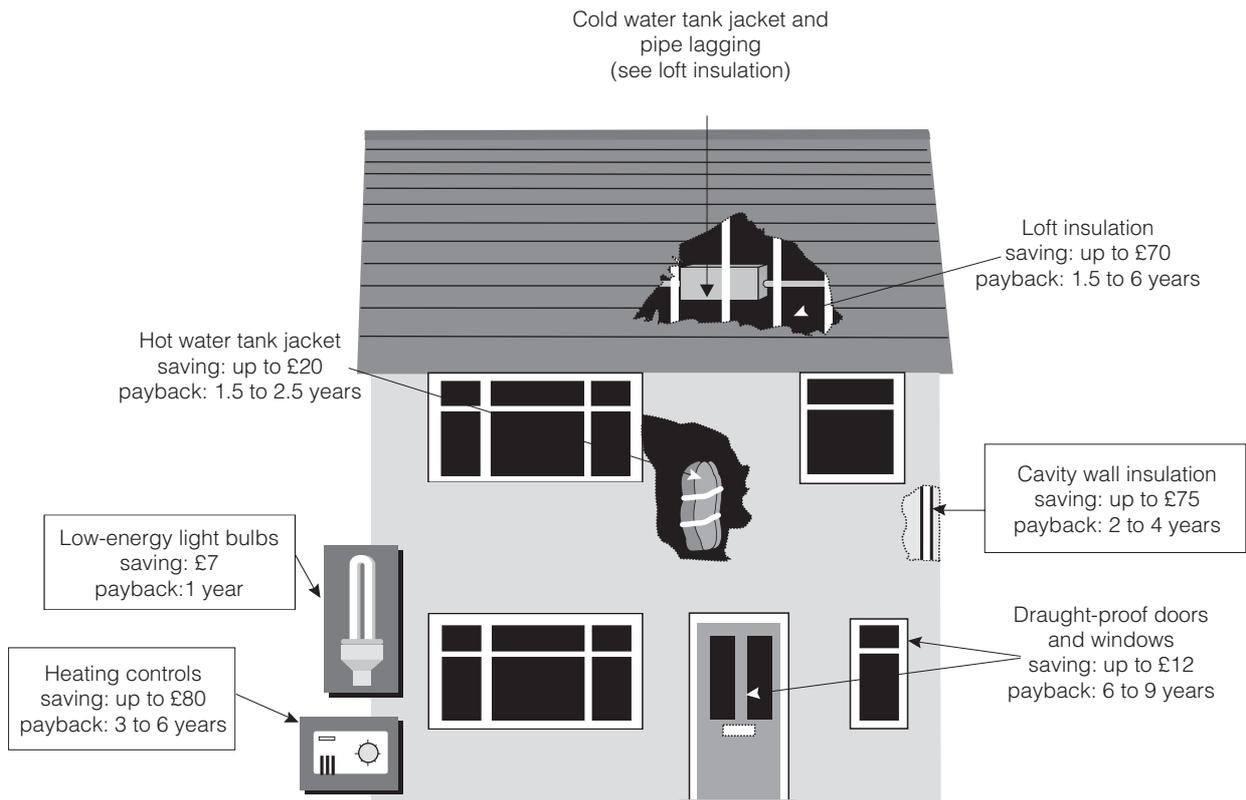
Source: Building Research Establishment: HEES Evaluation 1996; National Audit Office analysis of Eaga's 1996-97 claims database.

2.17 The Scheme changes introduced in July 1997 provided for a wider range of energy-efficient measures such as cavity wall insulation and heating controls. Not all the measures are equally energy efficient. Different authorities have produced different estimates of payback. These estimates may differ from actual savings and payback periods obtained under the Scheme, as discussed in paragraph 2.15, because the properties and heating practices of the over 60s and those on benefit may differ from the rest of the population. For the general population of households, there is broad agreement that loft insulation, hot water tank jackets and low energy lightbulbs are the most energy efficient (they have a shorter payback period). Cavity wall insulation and heating controls are less energy efficient; and draught-proofing is least energy efficient with a payback period of at least six years. Figure 9 shows the measures available under the Scheme before and after July 1997, and the savings and payback periods estimated by the Department.

Figure 9

Annual savings and payback periods for measures available under the Scheme

The estimated annual savings and the payback period are shown next to each measure



Source: Department of the Environment, Transport and the Regions

- Notes:
1. Measures available since July 1997 are shown in boxes.
 2. The payback periods are based on the minimum costs of installing each measure.
 3. The annual savings assume that all potential energy savings are taken as reduced fuel bills.
 4. Heating controls represent a full upgrade, excluding thermostatic valves.

Some measures available under the Scheme since July 1997 have shorter payback periods, and are therefore more energy efficient, than others.

2.18 Until July 1997 the householder was given a free choice between all the energy efficiency measures available. Since then the Scheme ranks measures according to their energy savings, so that, broadly, households are expected to have loft insulation before cavity wall insulation, and cavity wall insulation before heating controls. But householders remain free to opt for draught-proofing, instead of the other measures, in all cases. In the first three months of the new Scheme, July to September 1997, 72 per cent of households have opted for draught-proofing, 18 per cent for loft insulation, 10 per cent for cavity wall insulation, and a negligible proportion for heating controls.

Conclusions and recommendation

The Scheme has led to improved energy efficiency and greater comfort in eligible households, although the changes introduced in July 1997 should lead to a greater emphasis on energy efficiency.

Whilst the choice of measure is left to the householder, the Department and Eaga should consider what could be done to promote take-up of those measures available under the new Scheme which provide the greatest energy efficiency so that the benefits of the Scheme are maximised. The advice currently provided by installers might be supplemented by leaflets which make plain the relative merits of the different measures.

The measurement of Scheme benefits

2.19 In its 1996 consultation document on the future of the Scheme, the Department recognised that the data collected on the impact of the Scheme did not include measures of the energy savings achieved in households where energy efficiency measures have been installed. With the extension of the Scheme in July 1997 to include a wider range of energy efficiency measures, the Department considered it would be essential to set quantitative targets with which to measure the Scheme's impact on energy efficiency and its cost-effectiveness. To this end Ministers announced in June 1997 the following targets for 1997-98.

- A total of 400,000 grants to be paid in the year.

- An average increase of five points in the energy rating for each property in which measures are installed, using the Standard Assessment Procedure. This procedure yields an energy efficiency rating on a scale of zero (worst) to 100 (best) points. The average rating for occupied housing in England is 35, although there is wide variation around this average.

2.20 In order to measure the success with which the Scheme has improved energy efficiency, more sophisticated data gathering and analysis is needed. In carrying out its 1996 evaluation the Building Research Establishment recognised the flaws in the data available and concluded that future evaluations would require more systematic monitoring of properties both before and after the Scheme measures were installed in order to generate better data on energy savings. Since

July 1997 Eaga has routinely collected information to calculate the impact of each grant on the energy rating of the property, as measured by the Standard Assessment Procedure. The Department has told us that it is considering commissioning research in 1998 into the new arrangements for monitoring the Scheme's impact on energy efficiency.

2.21 The Department recognises that none of these changes will provide a measurement of the extent to which the Scheme results in increased comfort and warmth. Generally, those responding to the Department's 1996 consultation exercise were in favour of measuring these benefits, given the belief of many that the Scheme's overriding objectives continued to be social in nature. They suggested that such benefits could be measured through periodic surveys of households who had benefited from the Scheme, to gather information on their perceptions of its impact on their warmth and comfort.

Conclusions and recommendation

The changes in July 1997 will provide better measures of the Scheme's impact on energy efficiency. Increased warmth and comfort continues to be a key benefit from the Scheme, but its extent or impact has not yet been measured.

The Department might usefully extend the surveys recommended above to collect data on householders' perceptions of the increased warmth and comfort which resulted from the insulation measures provided under the Scheme.

Creating jobs and encouraging training

2.22 A secondary objective of the Scheme was, until July 1997, to create jobs in the insulation industry and strengthen the attractiveness to the unemployed of training in basic insulation skills. Although no targets or forecasts were set at the start of the Scheme for the number of jobs and training opportunities to be created, the Department and Eaga believe the Scheme will have had a positive effect on both jobs and training in the insulation industry, because of the extra work generated by the installation of energy efficiency measures for over 2.3 million households since the Scheme began.

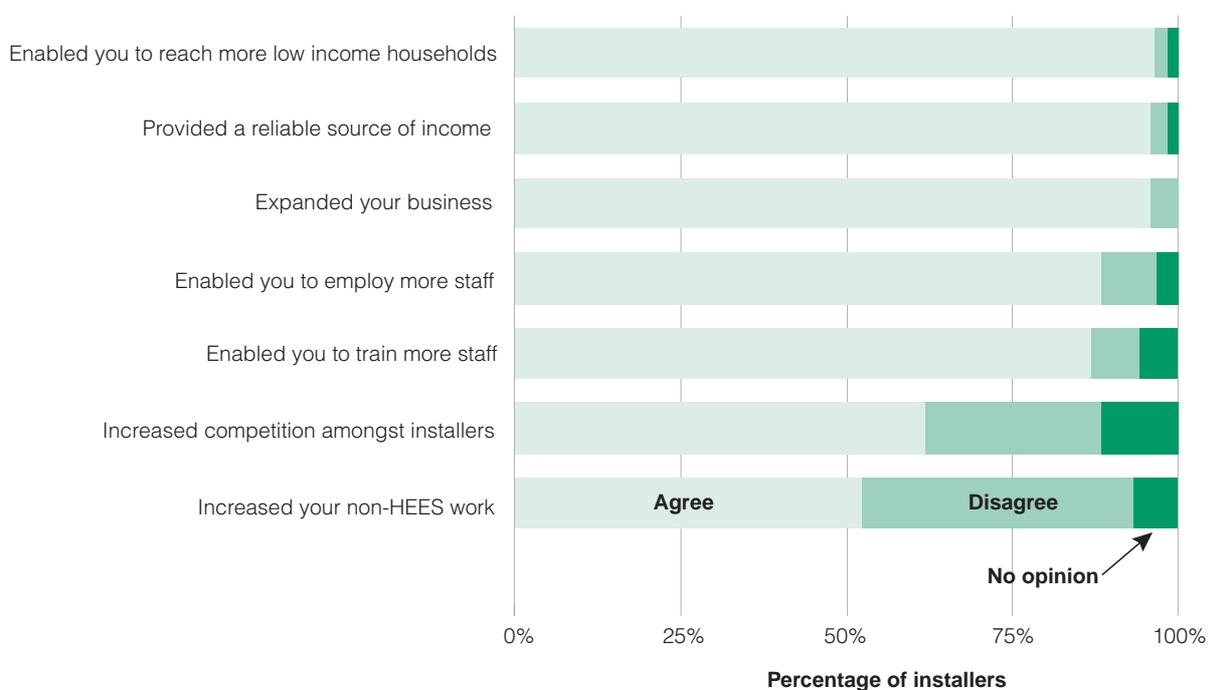
Creating jobs

2.23 The Department has estimated that the Scheme has generated around 5,000 extra jobs, although this figure is not based on rigorous surveys or analysis and it includes not only those jobs created by installers but also in the insulation and draught-proofing materials manufacturers, and in distribution and transport. To estimate the number of direct insulation jobs generated by the Scheme, we conducted a survey of the 166 headquarters offices of all 392 installers operating under the Scheme in December 1996, to find out about the Scheme's impact on

jobs. The survey, which received a high response rate (73 per cent) found that a clear majority (over 95 per cent) of those responding believed that the Scheme had been beneficial in enabling them to carry out work for low income households; and to expand their business and provide a reliable source of income. Two thirds of installers believed that the Scheme had increased competition in the industry (Figure 10).

Figure 10

The views of installers on the effects and benefits of the Scheme



Source: National Audit Office installer survey

The majority of installers who were operating under the Scheme as at December 1996 believed the Scheme had enabled them to reach low income households and expand their business.

2.24 Figure 10 also shows that a clear majority of installers (over 85 per cent) reported that the Scheme had enabled them to employ and train more staff. The National Audit Office survey found that, on average, installers had increased their number of full-time employees by 18 per cent (an increase of 9 staff per company) between joining the Scheme and December 1996. If this pattern were repeated in those firms not responding to the survey, this would mean that installers have created nearly 1,500 jobs as a result of the Scheme. In addition, the National Audit Office found that installers had increased their part-time work force, on average,

by some seven per cent (half of a part-time post per installer). Across all installers the National Audit Office estimated that a total of 90 part-time jobs had been created (the equivalent of 45 full-time posts).

2.25 Overall, therefore, the National Audit Office estimated that, up to December 1996, the Scheme has created around 1,600 jobs, including 90 part-time jobs, in the installers working under the Scheme, at a time when the general trend in the number of jobs in the insulation trade has been downwards. The jobs lost elsewhere in the wider insulation industry have been offset by those created by the Scheme, with the net reduction in the wider industry, to the end of 1995, the latest period for which data is available, being around 1,600 (Figure 11). Although it is early days, some firms have voiced concern that the recent expansion of the Scheme to include cavity wall insulation may have led to loss of work for some installers not approved or appointed locally under the Scheme, because some local authorities prefer to place all work, both Scheme and non-Scheme, with Scheme-appointed installers. The Department is considering this development.

Trends in numbers employed in the wider insulation industry, 1991-95

Figure 11



Source:
Department of the Environment:
Housing and Construction
Statistics

There was a fall of 1,600 in the number of people employed in the wider insulation industry in the period 1991-95. Data for 1996 are not yet available.

Encouraging training

2.26 Another objective of the Scheme was to encourage training in insulation skills. The National Audit Office survey of installers found that, on average, each installer had provided training in relevant insulation skills to some 13 staff, between the installer joining the Scheme and December 1996. This was an increase of 81 per cent in the number of trained staff employed by the installers. Based on the survey results, the National Audit Office estimates that a total of 2,120 persons had received training in the industry as a result of the Scheme.

Conclusion

The Scheme has had an impact in creating at least 1,600 jobs and 2,100 training opportunities in those installers appointed to do work under the Scheme up to December 1996. At the same time, to the end of 1995, the latest period for which data is available, employment in the insulation industry as a whole has fallen by 1,600.

Part 3: Administration and monitoring of the Scheme

Introduction

3.1 Eaga has administered the Scheme since it began in January 1991. This section of the report examines how well Eaga has carried out its responsibilities, and how the Department monitors Eaga's performance, covering:

- Eaga's contract with the Secretary of State and performance monitoring;
- the appointment and allocation of funds to installers;
- the time taken to complete the work and pay the grant;
- the reasonableness of the work done and its cost;
- the quality of the work done; and
- customer satisfaction with the Scheme.

The National Audit Office also reviewed, by use of a survey, practice and experience in similar home insulation schemes run by the electricity companies. We also received views from some local authorities carrying out similar energy efficiency measures. The results of that work are used as appropriate in this Part of the report, and brought together at the end of this Part.

The contract with Eaga

Award of contract

3.2 Eaga was awarded the initial contract to administer the Scheme in October 1990 following competitive tendering. This contract ran until March 1993. A second contract, which ended in March 1996, was awarded to Eaga on a single tender basis; as was the current five year contract awarded in April 1996 which runs until March 2001.

3.3 The Department told the National Audit Office that it awarded the second and third contracts to Eaga by single tender on the following grounds:

- A change of administering agency could risk damaging the reliable delivery of a high profile Scheme. In particular, a change of administrator could lead to disruption whilst installer registrations and payment mechanisms were transferred, possibly resulting in increased waiting times.
- The low level of interest shown by other organisations when the original contract was tendered would more than likely be repeated, since the growth in the size of the Scheme would lead to higher entry costs. Eaga would be likely to retain the contract as a result of its experience in running the Scheme in the past.
- Eaga would be willing to make concessions on the contract price if the contract was offered under single tender, but might increase its fees towards higher market rates should it be required to compete for the renewal of the contract.

3.4 In 1995 the Department appointed consultants to review Eaga's proposal for the renewal of their contract. The consultants concluded that there was a sound basis for single tender action, on the grounds that they considered Eaga to be efficient and well run; and that competition for the contract would be disruptive and might lead to the loss of staff in the intervening period. At that time the Regional Electricity Companies were operating similar schemes, albeit on a smaller scale. The Department did not invite alternative providers to bid because, as far as they could ascertain, another company within the Eaga Group was also used as managing agent by other schemes which had one. Since the contract was not open to competitive tender the Department was not able to test its presumption that competition would lead Eaga to raise its fees.

3.5 The contract for administration of the Scheme falls within those services defined by European Union Council Directive 92/50 which are not required to be let by competitive tender. The Directive is implemented in the United Kingdom by the Public Services Contracts Regulations 1993. Before letting the contract by single tender the Department sought and obtained Treasury approval. The Treasury accepted the Department's view that nothing would be gained by going out to competitive tender. However, it indicated to the Department that it would expect the scope for introducing competition to be reviewed at the end of the current contract period.

Conclusions and recommendation

The contract was awarded to Eaga without competition in 1993 and 1996 because of the absence of viable alternatives. However, the electricity companies and local authorities have operated similar schemes for some years, on a smaller scale.

The Department might consider what more could be done to draw on or generate more competition for Eaga, in the run up to the renewal of the contract in 2001.

The administration fee

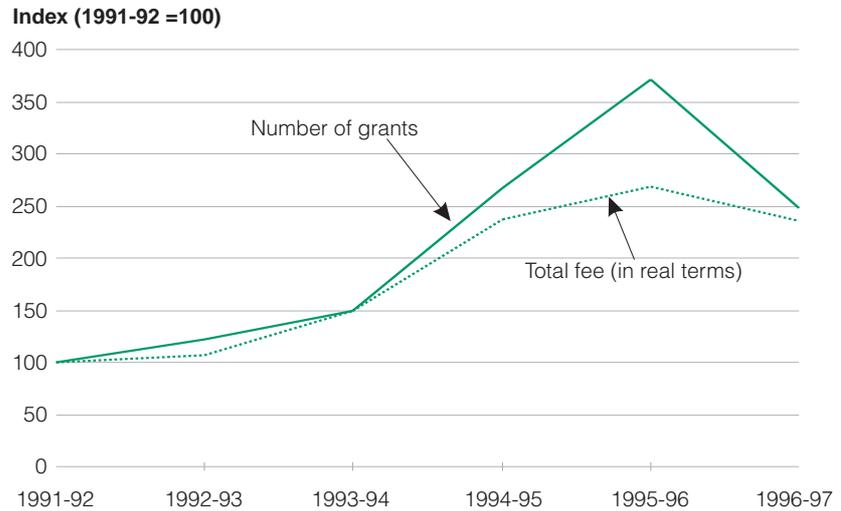
3.6 The Department pays an annual fee to Eaga for administering the Scheme. The fee in 1996-97 amounted to £5.2 million, and in the first six years of the Scheme Eaga's fees totalled £23.8 million, around seven per cent of the total of £337 million in grants paid. Between 1991-92 and 1996-97 Eaga's fee ranged between 5.7 and 7.7 per cent of the total expenditure on the Scheme each year. Eaga now employs some 120 staff engaged on Scheme-related work, mostly engaged on the processing of claims.

3.7 Between 1991-92 and 1996-97 Eaga's fees rose and fell broadly in line with the number of claims, except in 1995-96 when a 39 per cent increase in claim volumes coincided with a 13 per cent rise in fee in real terms (Figure 12). The divergence in 1995-96 resulted from a large increase in the amount of funds made available for the Scheme in that year which, when applied to a fee formula set in 1993 on the basis of claim volumes and funding levels expected at that time, led to a lower fee per grant. Eaga was able to absorb this extra work at a lower fee through administrative efficiencies, and still made a surplus in 1995-96. Since 1991-92 Eaga's fee for administering each grant has fluctuated between £9.51 and £13.18 at 1996-97 prices. In 1996-97 it was £12.53, very similar to the £13.18 it had been in 1991-92 (at 1996-97 prices). In 1997-98 the fee is forecast to fall in line with the number of claims.

3.8 Eaga's fee is calculated on the basis of a fixed element and a variable element which is linked to the value of grants paid. The Department built in a deflator to the formula for the annual calculation of the fee, to reflect the fact that Eaga could be expected to become more efficient over the lifetime of the contract and to share the benefit of such efficiency gains. In 1995, consultants appointed by the Department considered that the basis of the fee was sound, although they were unable to assess whether the deflator accurately reflected the business risk faced by Eaga.

Changes in Eaga's fees at 1996-97 prices, and the number of grants, between 1991-92 and 1996-97, indexed to 1991-92

Figure 12



Source: National Audit Office analysis

Between 1991-92 and 1996-97 Eaga's fees have broadly kept pace with the number of grants except in 1995-96.

3.9 The consultants also considered that there was a sound case for linking the variable element of Eaga's fee to the number of applications rather than to the value of the grants paid, because costs are driven by the number of grant applications. They also argued that the current fee mechanism did not provide an incentive to Eaga to control the cost of grant payments. Eaga, however, believed that it already did sufficient to keep the value of individual grants to a reasonable level. The Department concluded that the resources needed to negotiate and implement this change were not available at the time. It also considered the timing would be inappropriate given the uncertainty over the future level of funding for the Scheme, and the review of the Scheme scheduled for 1996. As a result, the basis for calculating the variable element of the fee was not changed when Eaga's contract was renewed in 1996.

Conclusions and recommendation

The Department might reasonably expect the costs of Scheme administration to go down over time, due to efficiency improvements. Apart from in 1995-96, Eaga's fee has reflected the changing volume of work, and the unit cost to the Department has been broadly constant.

The Department might consider re-negotiating a simpler fee structure, basing it on a unit cost of administration less an annual deflator, rather than the current structure involving a fixed and variable element.

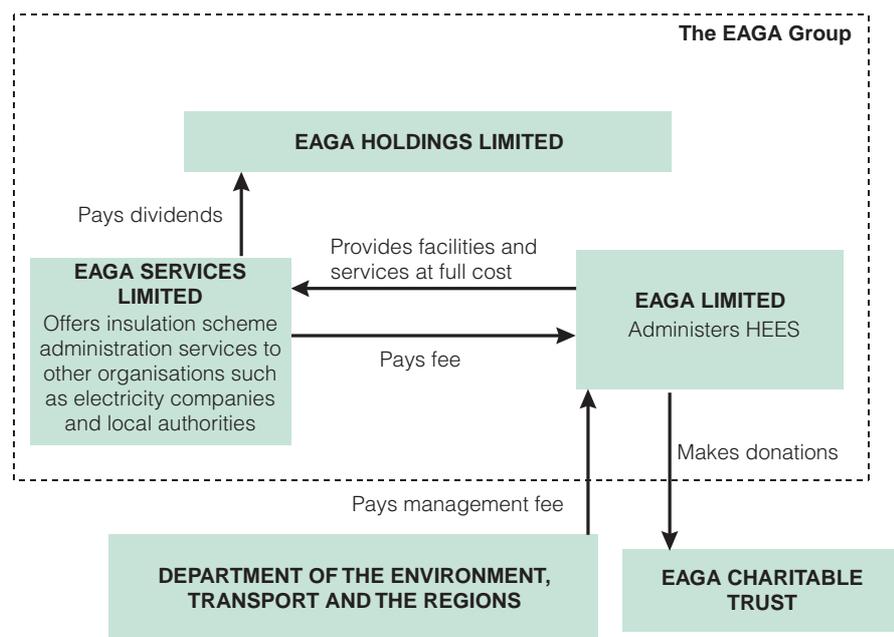
Eaga's finances

3.10 In agreeing the level of fee payable to Eaga the Department takes a view on its reasonableness in relation to the services to be provided. To date the Department has paid little regard to the impact of the level of fees on Eaga's financial position; although before setting the level of fees, it has in the past taken the advice of consultants on the reasonableness of Eaga's profitability.

3.11 We examined Eaga's finances. Eaga (Eaga Limited) is part of the Eaga Group which also includes Eaga Services Limited and Eaga Holdings Limited (Figure 13).

The relationships between the Department, Eaga Limited, Eaga Services Limited and Eaga Holdings Limited

Figure 13



Note: The Eaga Group is non-profit-distributing.

The Department pays a fee to Eaga Limited for administering the Scheme. Eaga Limited also administers a similar but much smaller scale scheme in Northern Ireland on behalf of the Department of the Environment (Northern Ireland). Eaga Limited provides services to another member of the group, Eaga Services Limited, which obtains business on a commercial basis from other customers. Eaga Limited also funds the Eaga Charitable Trust which is outside the group.

Source: Eaga Limited

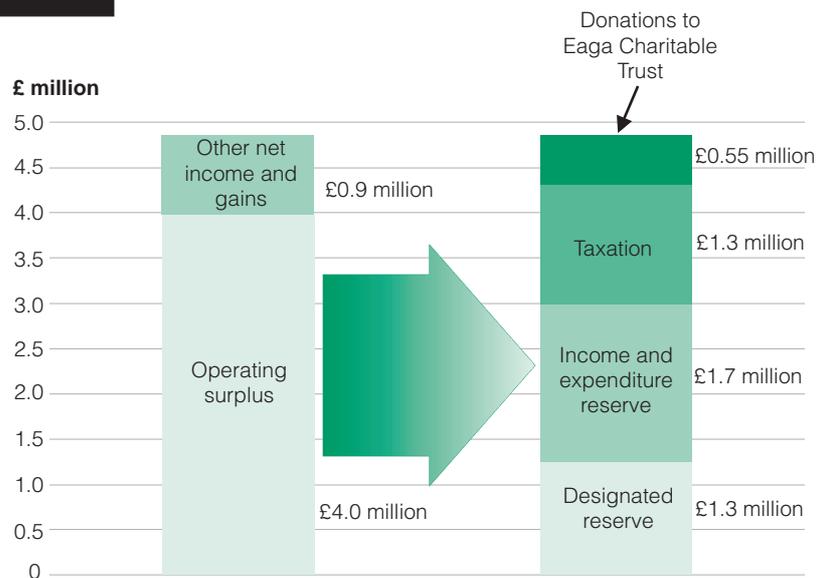
3.12 The financial relationships between the different parties are as follows:

- Eaga Limited administers the Home Energy Efficiency Scheme on behalf of the Department, in return for a management fee. As a non-profit-distributing company, any surpluses are retained within the company. Eaga Limited also administers a similar but much smaller scale scheme in Northern Ireland on behalf of the Department of the Environment (Northern Ireland).
- Eaga Services Limited is a private company set up by Eaga Holdings Limited to administer other insulation schemes, including some grant-based schemes, on a commercial basis, on behalf of organisations such as the electricity companies, local authorities and the Energy Saving Trust.
- Eaga Services Limited pays dividends to Eaga Holdings Limited, which is the sole equity holder. No dividends were paid in 1994-95, £9,717 was paid in 1995-96 and £28,187 was paid in 1996-97. As Eaga Holdings Limited is a non-profit-distributing company such dividends remain within the group.
- Eaga Services Limited pays to Eaga Limited a proportion of costs which are common to both of them, such as heating and lighting, based on turnover. Consultants employed by the Department in 1995 concluded that the basis on which costs were apportioned was reasonable. Eaga Services Limited also uses the services of Eaga Limited to provide grant processing, technical inspections and the appointment of installers, and pays Eaga Limited a fee based on full cost recovery.
- If Eaga Limited is wound up, its memorandum of association requires that its assets be distributed to an institution having similar objects, rather than to the members of the company. As the only member of Eaga Limited, Eaga Holdings Limited is precluded from receiving such assets if Eaga Limited is wound up.
- The Eaga Charitable Trust is an independent body established by Eaga Limited to fund projects related to the alleviation of fuel poverty and increasing public awareness of the benefits of energy efficiency. It is supervised by a Board of Trustees, and receives charitable donations from Eaga Limited.

3.13 Eaga Limited’s finances are summarised in Figure 14. To the end of 1996-97 Eaga made gross operating surpluses amounting to £4.0 million. By far the greatest part of these surpluses came from administering the Scheme, the rest coming from administration of the much smaller scheme in Northern Ireland and a small surplus on Eaga’s activities on their own account. This £4.0 million surplus represented an average margin of 16 per cent on its operating costs. Including earnings from other sources, interest, and gains and losses from disposal of assets, the gross surplus over this period totalled £4.9 million. From this surplus Eaga paid £1.3 million in taxes and donated £0.55 million to the Eaga Charitable Trust. In 1995, the Department’s consultants concluded that Eaga Limited’s profitability was reasonable and neither unusual or exceptional, although they were not able to review Eaga Limited’s expenditure in detail. As a non-profit-distributing company Eaga Limited does not pay dividends.

Eaga Limited’s finances, 1990-91 to 1996-97

Figure 14



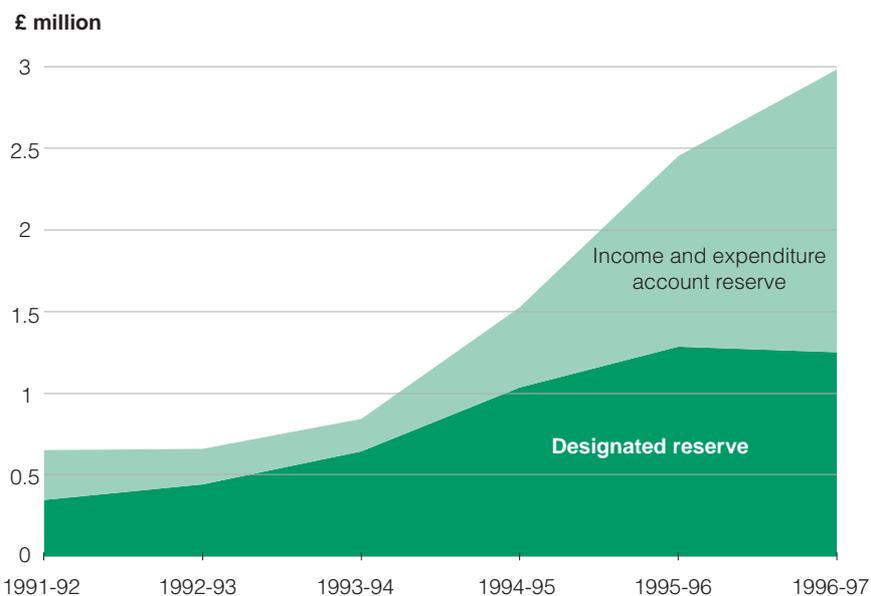
Source: Eaga Limited's Annual Report and Accounts, 1990-91 to 1996-97

In the period to 1996-97, Eaga Limited made surpluses totalling £4.9 million. After tax and charitable donations, the net accumulated surplus of £3.0 million has been transferred to reserves.

3.14 Figure 15 shows the growth in Eaga Limited’s accumulated reserves, to which its surpluses have been transferred. By the end of 1996-97, Eaga Limited had transferred some £1.3 million of its surpluses to a designated reserve, which was established to enable it to meet its contractual liabilities, including redundancy costs, in the event that it ceased to administer the Scheme, and to cover the cost of a diversification strategy aimed at extending its administration services to other customers. A further £1.7 million is held in Eaga Limited’s reserves, for unspecified purposes.

Eaga's accumulated reserves between 1991-92 and 1996-97, at 1996-97 prices

Figure 15



Source: National Audit Office analysis of Eaga's Annual Report and Accounts 1991-92 to 1996-97

Eaga's accumulated reserves have grown rapidly since 1993-94.

3.15 We asked the Department about the extent to which it monitored the level of Eaga Limited's surpluses, its accumulated reserves, and the uses to which they were put or intended. The Department told the National Audit Office that it had access to Eaga's annual accounts and was aware of its surpluses, but that at the time Eaga's fees were last reviewed in late 1995 these surpluses were not a cause for concern. In the Department's view, it had agreed what it considered to be a reasonable fee for the administration of the Scheme on the basis of advice from its consultants.

3.16 The present contract provides for the Department to re-negotiate a variation in the fixed element of Eaga's fee in the event that the total expenditure on grants falls below 85 per cent of what it had been initially. The contract is subject to formal confirmation by the Department after 20 months and 40 months provided Eaga has met performance criteria which the contract sets out (Appendix 2). An unsatisfactory outcome at each of these break points would allow the Department to terminate the contract. In other circumstances any part of the contract may be amended or modified by agreement between the Department and Eaga, or terminated by either party with three months notice.

Conclusions and recommendation

We are surprised at the surpluses and reserves built up from a contract awarded without competition and from the low risk administration of a publicly funded grant scheme.

The Department should look again at what constitutes a reasonable profit for Eaga on Scheme work and ensure that Eaga's fee structure does not result in unreasonable surpluses, in view of the absence of competition when the contract was last awarded, and take the profitability of the contract into account in subsequent negotiations of fees. For example, any future contract could allow for the Exchequer to receive an agreed proportion of any surpluses above a predetermined threshold. To achieve this before 31 March 2001 would require voluntary re-negotiation since the current contract with Eaga does not include any provision for revisions to fees other than in exceptional circumstances.

Departmental monitoring of Eaga's administration of the Scheme

3.17 Prior to the introduction of changes to the Scheme in July 1997, the Department assessed Eaga's performance against four targets, included in the contract, which focused on the timely processing of claims and the level of technical inspections. Eaga has consistently achieved these targets, and the Department has been satisfied with Eaga's performance. From July 1997, the Department has introduced new measures which should provide a better basis for assessing Eaga's performance. However, while Eaga is required to conduct surveys of householder satisfaction, no related target has been set. We consider that these indicators could be improved further by extending them to include a target for the degree of householder satisfaction with Eaga's administration (Figure 16).

3.18 The quarterly reports Eaga provides to the Department include additional and useful information about other aspects of Eaga's stewardship of the grants paid and the performance of the Scheme, such as the proportion of installers' work meeting technical standards, the percentage of householders satisfied with the work done by installers, and the average cost of claims by type of work. Because they are not directly or fully under Eaga's control, these measures are not included in the contract. Nonetheless, we consider that the usefulness of these other indicators could be enhanced if the Department sets targets for them, to further and to better assess the achievement of Scheme objectives.

Conclusion and recommendation

The new measures introduced in July 1997 will provide the Department with a better view of Eaga's performance.

The Department should explore the scope for introducing further performance indicators such as those identified by the National Audit Office, in order to obtain a broader and better assessment of how efficiently and effectively Eaga has administered the Scheme.

Indicators of Eaga's performance introduced in July 1997; and further indicators and targets identified by the National Audit Office

Figure 16

Eaga's administration

Contractual indicators introduced in July 1997:

Time taken from receipt of application to payment of claims:

Target: 90 per cent (excluding those selected for inspection) within 15 working days.

Time taken to respond to complaints from claimants:

Target: 90 per cent within 15 working days.

Further contractual indicator which could be introduced (with targets to be set by the Department):

The percentage of householders satisfied with those aspects of the administration of the Scheme which are within Eaga's control.

Indicator reported in Eaga's quarterly reports for which targets could be set by the Department:

The percentage of householders satisfied with the work done by installers.

Eaga's stewardship of grant paid

Contractual indicators introduced in July 1997:

Financial management:

Target: reconcile every six months funds received and paid out - to within 0.5 per cent of the funds received.

Inspection:

Target: Five per cent of annual total of applications randomly sampled for compliance with eligibility criteria.

Target: Five per cent of annual total of applications randomly physically inspected to assess quality of work and materials and accuracy of quantities claimed.

Target: Ninety per cent of physical inspections completed within 30 working days of selection.

Indicators reported in Eaga's quarterly reports for which targets could be set by the Department:

The percentage of jobs meeting Eaga's technical standards, especially those standards critical to the safety and energy efficiency of the work done.

The average cost of claims, by type of work.

Source: Contract between the Secretary of State for the Environment and Eaga Limited for the administration of the Scheme for the period April 1996 to March 2001, signed 12 March 1996, and varied on 30 June 1997; Eaga's quarterly monitoring reports; and the National Audit Office.

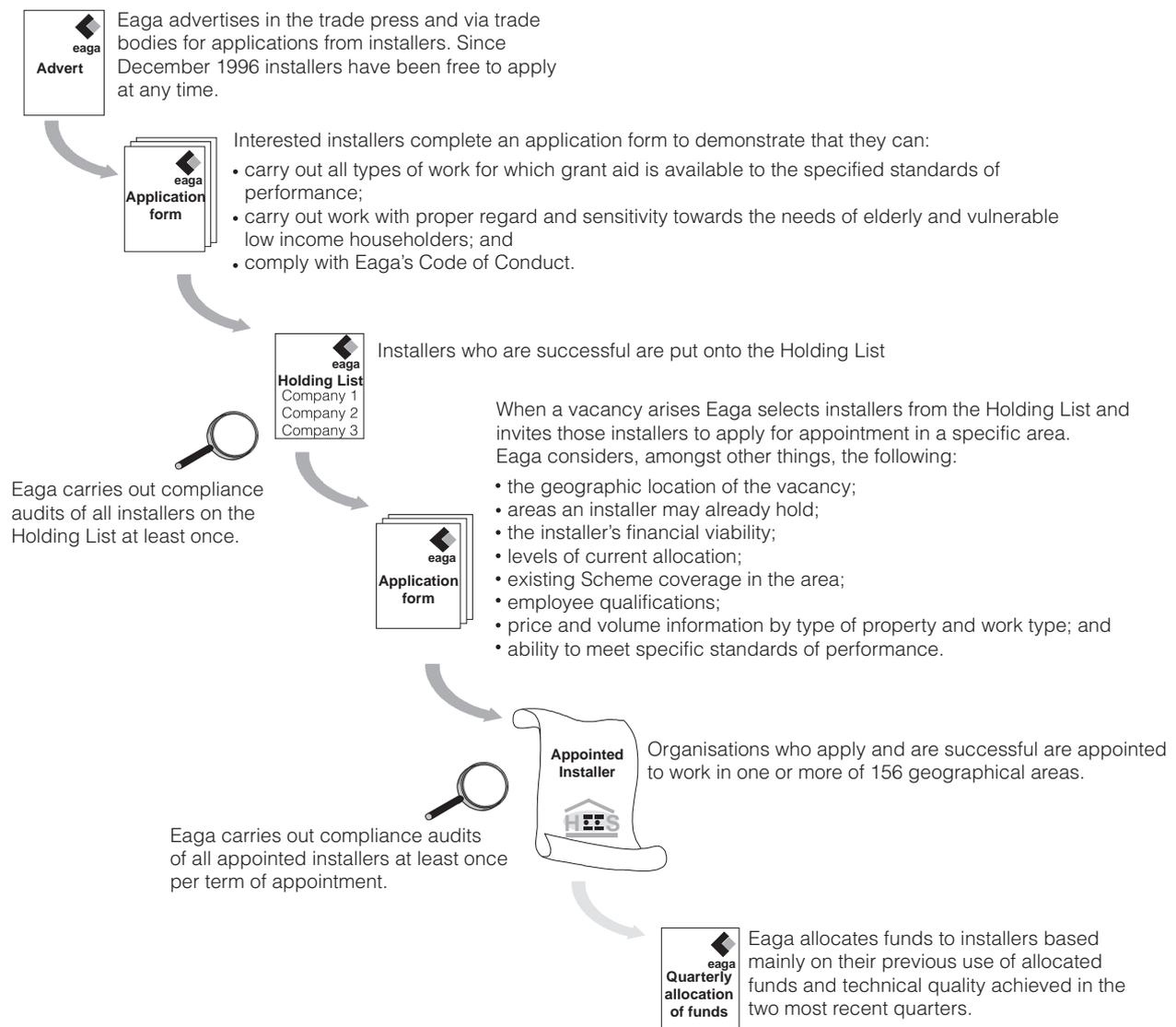
The Department has widened the scope of the indicators it uses to measure Eaga's performance, but these could be extended further.

The selection and appointment of installers and the allocation of work

3.19 In order to maintain standards of work and proper conduct, installers are subject to a detailed selection and appointment process before they can be allocated work under the Scheme. Figure 17 sets out the main stages in the selection and appointment of installers and the allocation of funds.

Figure 17

The main stages in the selection and appointment of installers and allocation of work



Source: Eaga Limited

Installers are subject to detailed checks before being allowed to join the Scheme, and are subject to periodic audits after they become an appointed installer. Funds are allocated each quarter.

3.20 Installers face a three stage process before they can carry out work under the Scheme. First, they apply to join a holding list. Until December 1996, Eaga invited applications from installers at least once a year, via the trade press and trade bodies, to apply for inclusion in the holding list. Since then installers have been able to apply for inclusion at any time. In assessing applications to be placed on the holding list, Eaga considers the applicant's ability to carry out the work to the required standard and to comply with its Code of Conduct for installers. It also considers, amongst other matters, the organisation's financial viability, training policy, previous relevant experience and quality control arrangements. At the same time as inviting new installers to apply to be included in the holding list, Eaga also reviews the continuing ability of installers already on the list to meet these criteria. Between ten and 20 per cent of applicants are successful and are placed on the holding list.

3.21 Once placed on the holding list, installers are not guaranteed an invitation to apply for future vacancies. Eaga divides the country into 156 geographical areas, for which installers are appointed. Until July 1993, when a vacancy arose or an area appointment came up for renewal, they were subject to open competition, but Eaga found that this led to high administration costs and delays in appointment. Since July 1993 Eaga has invited selected installers on the holding list to bid for the vacancy. In assessing installers' applications Eaga considers, amongst other things, the installer's proximity to the area where the vacancy has arisen; their capacity to take on additional work; and their financial viability. Installers were appointed for two years although Eaga has now phased in three year appointments. Installers are initially appointed for a probationary period of eight months, and their appointment will be ended if they fail to deliver work to the expected standard. At the end of their appointment period, the incumbent installer has to compete with other applicants by re-applying for the area.

3.22 The final stage is when Eaga allocates funds to appointed installers in advance every quarter, from the sums made available by the Department. Eaga calculates each installer's allocation by multiplying the previous quarter's allocation by a factor. This factor is based largely on the extent to which the installer spent the sums allocated in previous quarters: those installers using less than 90 per cent of their allocations will usually have their allocations cut. In a smaller number of cases the technical quality of an installer's work will also affect the calculation: if an installer has a technical pass rate of less than 80 per cent (increased in September 1996 from 70 per cent), and if the pass rate is deteriorating, Eaga will apply a slightly lower factor. In practice the majority of installers meet this technical standard, for example for the allocations in the second quarter of 1996-97, 94 per cent of installers met the standard.

The fairness and competitiveness of the selection, appointment and allocation process

3.23 Under its contract to administer the Scheme Eaga is required to operate a procedure for selecting, appointing and allocating funds to installers which should follow current best practice in procurement and the principles of fair and open competition.

Fairness

3.24 Some installers have complained about the fairness and transparency of the procedures for selecting, appointing and allocating work to installers. In response to criticisms about transparency Eaga has since December 1995 organised seminars for installers to provide further information and guidance on how the application and allocation process works and since May 1996 has told applicants the reasons why they were unsuccessful.

3.25 The National Audit Office examined the fairness of the selection, appointment and allocation process, considering in particular whether Eaga's procedures were based on predetermined and consistent criteria, and whether, where judgements were made, these were subject to review.

- For selection to the holding list and appointment to specific installer vacancies, Eaga's staff use a checklist of criteria designed to assess whether the installer has the ability to carry out work to the required standard. Each assessment is subject to review by senior management.
- On the allocation of funds to installers each quarter, Eaga uses a formula to calculate each allocation, and there is little scope for bias in applying this formula. For example, of the 395 allocations for the second quarter of 1996-97 the formula was used to calculate all but nine of the allocations. Eaga did not use the formula (which is based largely on the previous quarter's allocation) to calculate allocations for six new installers, and three other installers successfully argued for changes to their allocation. In each case, the decision was reviewed by a senior manager.

3.26 In 1996 Eaga appointed independent chartered surveyors, Peter Fall Cowie, to assess each year the methods it used to appoint installers in specific areas from those on the holding list. The results are reported to the Chief Executive of Eaga and are now routinely copied to the Department. In 1996, Peter Fall Cowie

concluded that this selection and appointment process was fair and even-handed; and that each application was fully examined and dealt with in an unbiased manner.

3.27 In 1997 Peter Fall Cowie carried out a review of appointments to join the revised Scheme on 1 July 1997, and at Eaga's request this was extended to include a sample of installers selected to join the holding list. They found that Eaga relies heavily on subjective assessments of applicants' information; that judgements were not well documented, which made it difficult to determine the reasons behind selection or rejection and by whom decisions had been made; and that existing appointees were given greater credence than new applicants unless the existing appointee had demonstrated poor quality in previous work.

3.28 In the light of Peter Fall Cowie's 1997 report, and separate representations to the National Audit Office and the Department from some installers, we carried out a further review of Eaga's selection and appointment procedures. The results confirmed the earlier findings from Peter Fall Cowie. We also found that, although separate guidance is provided, the application forms Eaga uses to obtain information from installers did not help installers provide the information most useful to the area appointment decision; and that in some cases Eaga did not provide installers with complete, accurate and helpful explanations of the reasons for non-appointment. In the light of the Peter Fall Cowie report and the subsequent work we carried out, Eaga is taking action to further improve its selection and appointment procedures and documentation.

3.29 The National Audit Office noted too that the annual reviews by Peter Fall Cowie do not cover the allocation of funds to installers each quarter, where similar considerations of fairness and transparency should apply.

Competitiveness

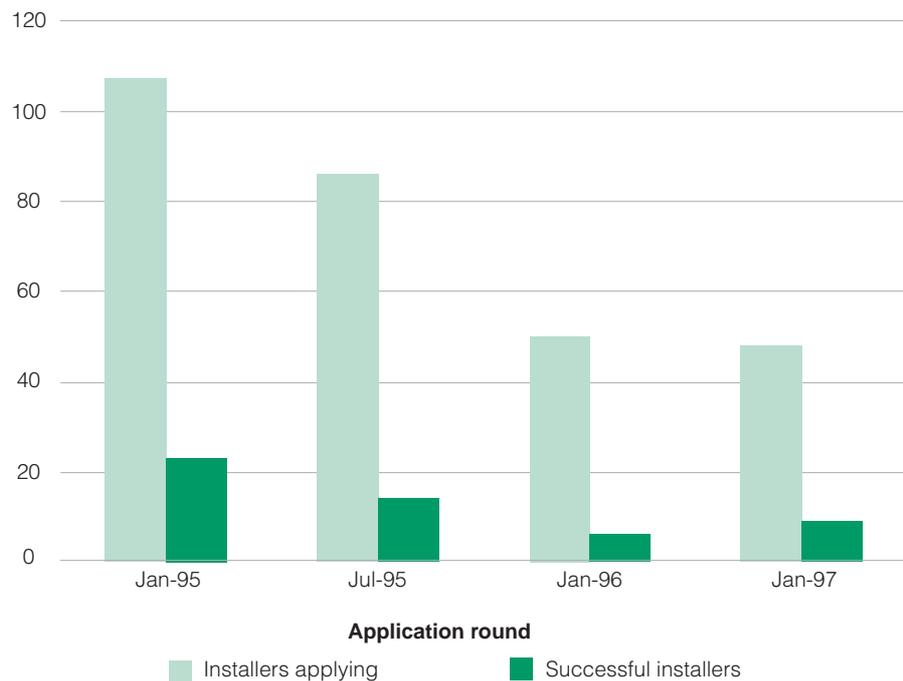
3.30 In March 1997, there were 195 companies on Eaga's holding list and, of those, 164 were appointed ('registered') to do Scheme work in at least one area of the country. Despite the time for which the Scheme has already operated, there has been regular movement on and off the holding list, and there is still competition amongst installers to enter the Scheme. For example, since January 1995 Eaga has invited applications in four separate rounds, which have each attracted between 48 and 107 applicants. Between 12 and 21 per cent of applicants were successful. Each successive round has resulted in fewer applications, although the number of applicants has stabilised at around 50 after the January 1996 round (Figure 18).

The recent expansion in the range of insulation measures eligible for grant may increase the number of companies wishing to be appointed to the Scheme.

The number of applications received to join the holding list and the number of successful applications, between January 1995 and January 1997

Figure 18

Number of installers



Source: Eaga Limited

Eaga continues to attract applicants for its holding list, although the number has been falling. Between 12 and 21 per cent of applicants are successful.

3.31 In order to provide competition amongst installers, and to offer households a choice of installer within each area, the Department expects there to be at least two installers in each area. At 31 March 1997 there were 156 distinct installer areas. The vast majority of areas had two or three installers. Only four areas had just one installer appointed in regions where remoteness makes it difficult for more than one installer to operate. At the end of March 1997, there were a total of 390 installer area appointments.

3.32 Area appointments are only subject to competition when the contracts of existing installers expire, every three years, or, infrequently, if installers resign or are de-registered. When a vacancy occurs, Eaga invites companies to bid. Over the last five years an average of 13 per cent of all appointments have been companies appointed for the first time, whilst on average five per cent of installers have left the Scheme each year.

3.33 Prior to the revision to the Scheme coming into force from July 1997, throughout the selection and allocation process, Eaga's criteria for evaluating applications from installers focused primarily on an installer's ability to do work to a minimum quality standard, and to sustain a reasonable volume of work over the period of the contract. The estimated or bid price for the work was only the deciding factor in determining whether an installer is selected when all other factors were equal. The Department asked Eaga to give more weight to price in appointing installers to operate from July 1997. At the final stage of the process, when Eaga allocates funds to individual installers, neither the bid price nor the cost of the work actually done by an installer are included in the formula Eaga uses to calculate the quarterly allocation of funds. The principal determinant of future funding is instead the installer's ability to spend previous quarters' allocations.

De-registration

3.34 Eaga carries out audits on installers at least once during their period of appointment to check their continuing compliance with the conditions of registration. Installers who fail this audit are subject to more frequent audits until they meet the required standards. Eaga is able to de-register any installer who repeatedly fails to meet the standards of work and conduct required. Eaga also receives information on installers via complaints from the public, and where these warrant cause for concern over installer behaviour Eaga has acted to investigate and remove the installer. An example of such a case is shown in Figure 19.

3.35 In 1996-97 Eaga de-registered just one installer. More often, installers who continually fail to meet the standards either fail their probation period, or are invited by Eaga to resign from the Scheme. In 1996-97 the numbers of installers who left the Scheme for these reasons were four and three respectively.

Conclusions and recommendations

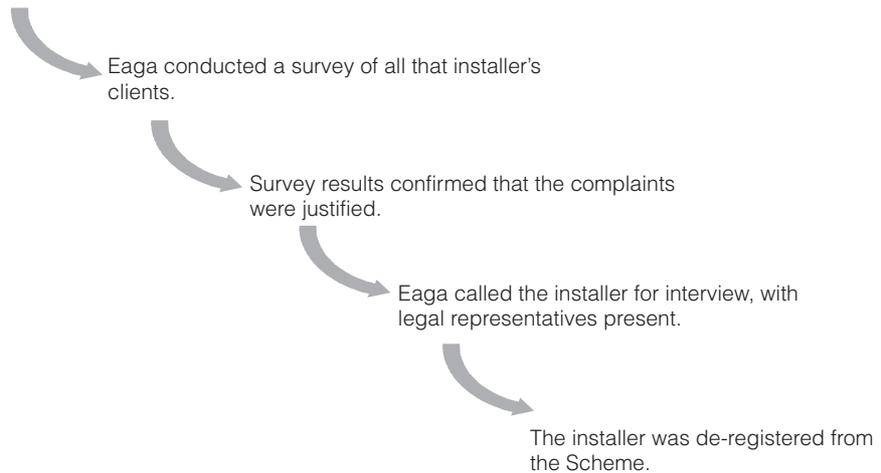
Eaga operates a demanding process for appointing installers which is generally competitive and fair. However, it could do more to document its decisions and to demonstrate that it has been fair; and whilst since July 1997 there has been more emphasis on price as a factor in the appointment of installers, it is not a factor in the allocation of work to them.

Eaga and the Department should consider the scope for introducing more competition and giving price greater prominence in the selection of installers and the allocation of work; for example, by allowing more installers to apply for vacancies as they arise and by allocating most work to those installers whose bid prices are lowest. In the first instance, this might be done on an experimental basis, to see whether it leads to lower cost without detriment to the quality of work done. Reviews of the fairness of the selection process should be expanded to include the allocation of work to installers.

An example of Eaga de-registering an installer following complaints from the public

Figure 19

Eaga received customer complaints that an installer was cold calling, asking for deposits and selling cavity wall insulation.



Source: National Audit Office

Eaga may de-register an installer following complaints from the public.

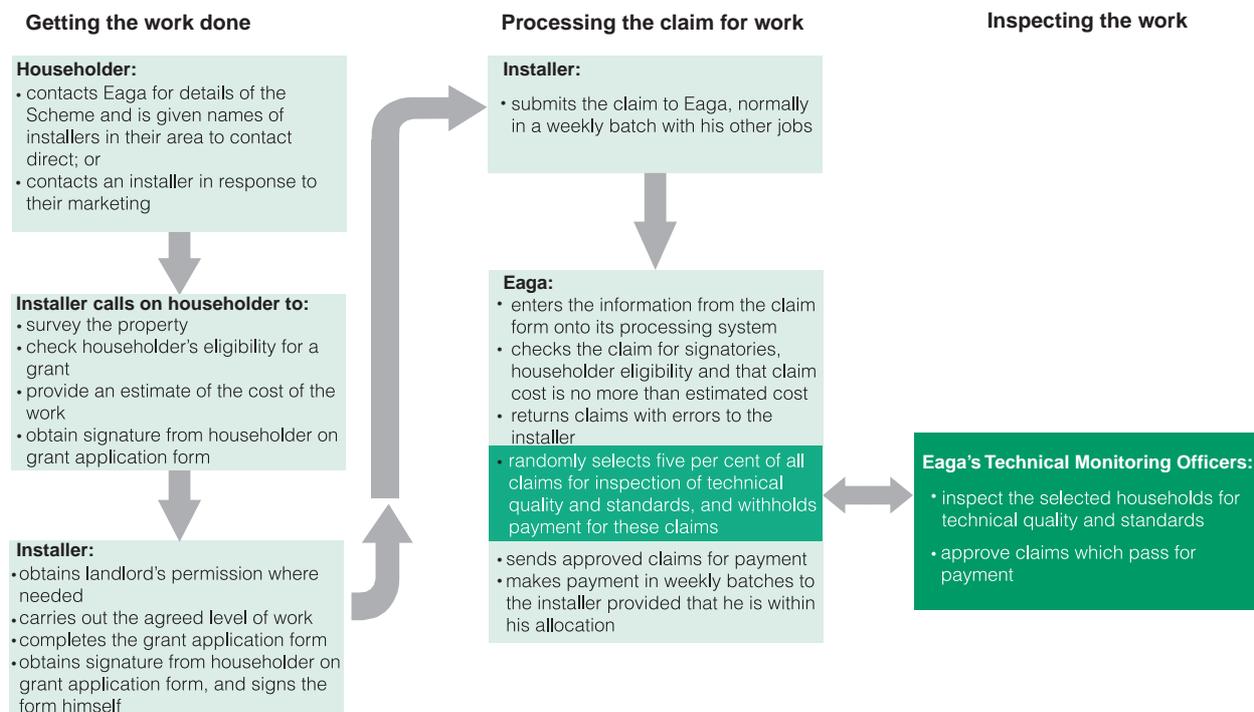
The claim process and checks on eligibility

3.36 Eligible households who want to have work done under the Scheme can contact installers or register their interest direct with Eaga. Figure 20 sets out the stages involved in getting the work done and processing installers' claims once the work is completed.

3.37 Householders are required to show installers documentary evidence sufficient to demonstrate their eligibility for grant before the work is done. Installers certify on the grant claim form that they have seen such evidence, and Eaga relies on this when making payment. However, Eaga selects five per cent of jobs for random inspection and for these jobs Eaga's Technical Monitoring Officers visit the property and check that the householder is in receipt of the benefits claimed (see paragraph 3.58). Where a Monitoring Officer finds that a householder was not eligible the claim will not be paid, leaving the installer to meet the cost of the work. In 1996-97, 241 inspections (one per cent of all those inspected) identified ineligible households which had received work under the Scheme.

Figure 20

Key stages in getting the work done and in paying installers' claims



Source: Eaga Limited

Getting the work done, and the payment of installers, involve a number of stages.

The time taken to complete the work and pay the grant

3.38 Whilst timeliness is not an explicit objective of the Scheme, its administration should not lead to unnecessary or unacceptable delays which defer the enjoyment of the benefits to which households are entitled, or which may result in the applicant losing their eligibility for the Scheme (because they have died or no longer receive benefit). Nor should it lead to long delays in installers receiving payment against the claims they submit, providing they have met the required standards.

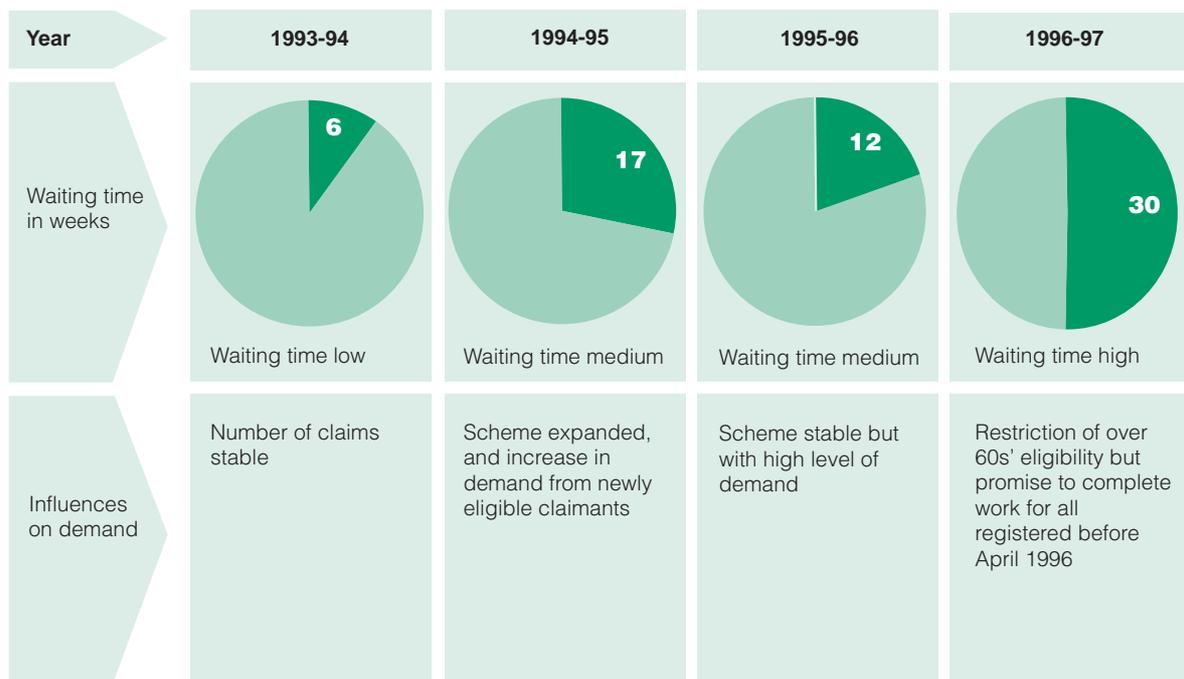
Time between expressing an interest and getting the work done

3.39 Eaga does not monitor the time which elapses between the point when a householder first expresses an interest in taking up the Scheme and when the subsequent work is carried out. However, Eaga includes a broad estimate of this average waiting time in its quarterly report to the Department, based on information received from installers. Over the last four years Eaga has estimated

that waiting times have been as low as six weeks and as high as 30 weeks. As at September 1997, Eaga estimated that the waiting time was eight weeks. These times are beyond Eaga’s control since they are caused by demand exceeding the funds made available by Parliament and the Department. Longer waiting times have followed changes in entitlement which bring surges in demand. For example, in 1996-97 the waiting time reached 30 weeks because of a surge in interest in early 1996 from over 60s whose eligibility was about to be reduced; this waiting time is expected to fall in 1997-98 as this backlog of work is cleared (Figure 21).

Figure 21

The average time between a household registering an interest and getting the work done, 1993 to 1997



Source: Eaga's quarterly monitoring reports

Waiting times have increased when changes in eligibility have increased demand for the Scheme.

Time taken to pay installers

3.40 Installers can assess a householder’s eligibility for grant and arrange to carry out the work without prior reference to Eaga, up to the limit of their quarterly allocation of funds. This is at their own risk, until Eaga receives and acknowledges a valid claim. The National Audit Office found that in 1996-97 Eaga took an average of nine calendar days to pay claims from installers, from the date the claim was received, excluding cases delayed by technical inspection and possible remedial work (see paragraphs 3.58, 3.63 and 3.64). Some 99 per cent of claims

were paid within 21 calendar days, against a target of 90 per cent. This compares favourably with government guidance that departments and agencies should pay their bills within 30 days of receipt.

The reasonableness of work done and its cost

The grant rate

3.41 In the beginning the Scheme was intended to provide grants towards the cost of work done, with eligible households required to make a small contribution to that cost. In 1993 the level of grant was raised to cover the full cost of the work. In setting the original grant rate, the Department of Energy relied on information about the costs of insulation work from the earlier Homes Insulation Scheme and the Energy Grant, and it consulted industry and interested parties. The grant rate remained largely unchanged until July 1997, except for an inflation-indexed increase in the maximum grant in 1992 and an increase of £16 in 1993 to compensate for abolition of the client contribution.

The cost of work done and comparison with electricity companies

3.42 We analysed the cost of work done under the Scheme, that is the costs claimed by installers (which may be more than the grant maximum), and compared these costs with the costs of similar work done for the electricity companies. Whilst these comparisons should be used with care, because of the different operation of the two schemes, we found the grant maxima and average grant payment for each type of work under the Scheme between 1995 and 1997 were comparable with the cost of similar work done for the electricity companies (Figure 22). But while the average cost of work done for the electricity companies has decreased over the two years, the cost of draught-proofing under the Scheme has remained the same, and the cost of loft insulation under the Scheme increased so that in 1996-97 it was £21 higher than the cost of loft insulation done for the electricity companies.

3.43 The cost of draught-proofing or loft insulation tends to be lower when done together on the same property than when done alone. This is most marked for loft insulation jobs, where in 1996-97 the average cost of all loft insulation jobs was £202, but was an average of £219 excluding those jobs where it was combined with draught-proofing. In either case the average cost of loft insulation under the Scheme in 1996-97 was higher than the grant maximum and this excess cost must be borne by the householder, the installer or a third party such as a local authority, where they are the

Figure 22**Comparison of Scheme grant rates and claim costs with rates paid to installers in similar schemes run by the electricity companies**

Measure	Grant maxima pre-July 1997	Average cost of installer claims in 1995-96	Typical cost of work done for electricity companies in 1995-96 ¹	Average cost of installer claims in 1996-97	Typical cost of work done for electricity companies in 1996-97 ¹
	£	£	£	£	£
Loft insulation	198.70	196	206	202	181
Draught-proofing	128.50	117	128 ²	117	117 ²

- Notes:
1. The rates have been calculated from the average prices paid on a range of property types with a similar mix to those in which measures have been installed under the Scheme. We have added Value Added Tax at 17.5 per cent to the actual cost of work done for electricity companies, to make them comparable with the Scheme. In total electricity companies' schemes provide loft insulation and draught-proofing to fewer households. They also tend to target areas, thus allowing work to be done in bulk, which may affect costs.
 2. The Energy Saving Trust rate for draught-proofing has been increased by some £6 to reflect the fact that under the Scheme the grant is available for the provision of a hot water tank jacket (typical cost £24) but only about 25 per cent of eligible households have this fitted.
 3. The average figures for loft insulation and draught-proofing include those installed as part of combined jobs. Work done for the electricity companies may similarly be combined with other energy efficiency measures.

Source: National Audit Office; Eaga; Energy Saving Trust

The levels of grant available for loft insulation and draught-proofing before July 1997 were comparable with the rates paid by the electricity companies, but the average cost of loft insulation under the Scheme was ten per cent higher.

landlord. This is despite Eaga's advice to installers when they apply for appointment that they should provide energy efficiency measures at an average price at or below the grant maximum for each type of work. Eaga attributes these excess costs to factors such as upgraded technical specifications and more demanding quality standards whilst grant levels have remained unchanged.

3.44 Since July 1997 there has been the same maximum grant of £315 available for all measures. In the first quarter under the new rules, July to September 1997, the average cost of draught-proofing was seven per cent higher than in 1996-97, increasing from £117 to £126. The average cost of loft insulation increased by 40 per cent, from £202 to £283, partly because of a change in specifications in July 1997 which allowed for a greater thickness of loft insulation material. In addition, since there is no longer a maximum grant of £199 for this particular measure, some householders with larger houses, who would previously have been liable to pay an excess themselves, may now be choosing it.

Conclusion

The cost of Scheme work in 1995-96 and 1996-97 was broadly comparable to the cost of similar work done for the electricity companies, although in 1996-97 the cost of loft insulation under the Scheme was £21 higher. The average cost of loft insulation work is higher than the grant maximum, despite Eaga's advice to installers when they apply for appointment that they should provide energy efficiency measures at an average price at or below the grant maximum for each type of work.

The changes to the Scheme introduced in July 1997 have had little impact on the average cost of draught-proofing work. But the average cost claimed by installers for loft insulation work has increased by 40 per cent, which is likely to be due to both a change in specifications, and raising the maximum grant available for this measure from £199 to £315 which has allowed the grant to cover the higher cost of loft insulation in larger properties.

Eaga's powers to control the cost of claims

3.45 Eaga told the National Audit Office that in principle it may not have the legal authority to reduce or amend installers' claims on the grounds of cost, because it is not a party to the contract between householder and installer. In contrast, the Department and the National Audit Office consider that Eaga has a responsibility to monitor the cost of claims submitted and to challenge those it believes to be excessive, on the grounds that Eaga has a duty to ensure that the funds Parliament has provided for the Scheme are used efficiently and effectively. In practice, Eaga does challenge the cost of some doubtful claims submitted by installers, following inspections of the work done. However, under new arrangements and regulations operating from July 1997, Eaga's power to amend or reduce claims is now clearer.

Conclusion and recommendation

The National Audit Office finds it surprising that Eaga believes it may not have the power to reduce or amend installers' claims on the grounds of cost (and therefore the grant paid), since no-one else is in a realistic position to do so.

The Department should clarify Eaga's legal powers to reduce or amend the cost of claims submitted by installers, and ensure that Eaga has an explicit responsibility to control the cost of claims.

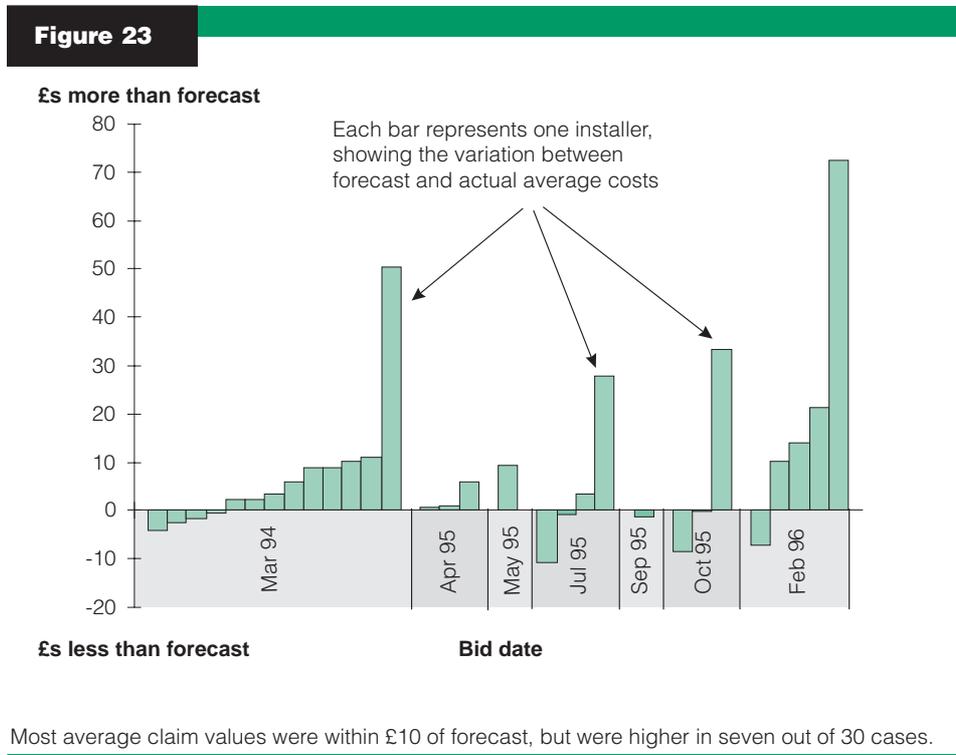
Eaga's control over the cost of claims

3.46 Prior to July 1997 installers were required to provide Eaga, when applying for appointment, with a forecast of average costs for each insulation measure. On receiving subsequent claims from installers, Eaga checked that the claim was not greater than the grant maximum or the installer's original estimate for that particular job, and that the form had been properly completed and signed. Claims containing such errors were returned to the installer.

3.47 Eaga did not use regularly the forecasts of average cost provided at the time of appointment in the subsequent vetting of individual claims submitted by installers. However, Eaga has carried out analysis once or twice a year on specific installers whose average grant claims exceeded by a significant margin the estimates they had provided at appointment.

3.48 The National Audit Office compared a sample of forecasts made by installers for particular Scheme areas with the average costs of work they carried out in those areas in 1996-97. We found that 23 out of 30 installers had average costs within £10 of the forecast they had submitted at the time of their appointment and of these, ten had average costs which were less than their forecast. But in seven cases the average cost was more than £10 higher than the forecast. In one case, the average was £70 higher and in another it was £50 higher (Figure 23). These variations could be caused by differences between the anticipated and actual mix of properties which were to be insulated.

The difference between average costs claimed in 1996-97 and the forecasts provided at the time of appointment, for a sample of 30 installers



3.49 Eaga's ability to control costs has been improved:

- since July 1997 installers have had to provide Eaga, when they apply for appointment, with firm quotes for the fixed and variable costs for the range of measures available under the Scheme, including unit costs of draught-proofing per window and square metreage of loft and cavity wall insulation material. These rates provide a more sophisticated method of assessing installer prices at the time of appointment, and Eaga also uses them as the basis for the subsequent pricing of individual claims by each installer, in contrast to the pre-July 1997 arrangements. Claims which are greater than the grant maximum are automatically reduced to the

maximum; and work charged at unit rates greater than those quoted are automatically reduced to the bid rates. This may reduce some of the variability in costs seen under the pre-July 1997 arrangements.

- Until November 1996, Eaga did not ask installers to provide details of the extent of work they had carried out when they submitted their claims, although it had a right to do so. As a result Eaga was not able to assess the reasonableness of claims, in relation to the work done, before the claims were paid. In November 1996, however, during the course of our examination, Eaga redesigned the claim form to require installers to provide more information about the amount of work carried out, to enable Eaga to make a better assessment of the appropriateness of the claim. On receipt, Eaga may check that the amount of work is broadly consistent with the size and type of property.

3.50 These checks, however, will not identify all claims which may be unreasonable, for example when the amount of work claimed is more than is done, or in some cases when the amount of work done is disproportionate to the size and type of property. Such cases can only be identified by physical inspection of the work and the property.

Variations in the cost of claims

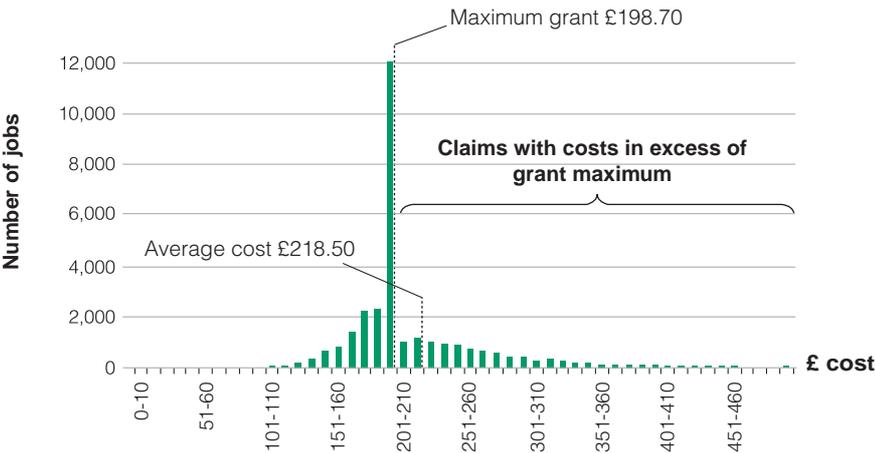
3.51 The National Audit Office examined all installer claims in 1996-97, to assess the level and variation in costs and to see whether such variation was reasonable. There was a wide variation in the costs claimed by installers for draught-proofing, loft insulation and combined jobs. Many claims were at or near the grant maximum for each type of work. For loft insulation and combined jobs, many claims were in excess of the grant maximum, with the excess cost borne by the installer or householder (Figure 24). In 1996-97, 23,000 (eight per cent) draught-proofing jobs were in excess of the grant maximum; as were 11,000 (36 per cent) loft insulation jobs and 21,000 (29 per cent) combined jobs.

3.52 The National Audit Office also found a large variation in the average costs of materials and labour charged by installers for each type of work (Figure 25). On a regional basis the highest installer average cost tended to occur in Scotland, and the cheapest in Yorkshire and Humberside.

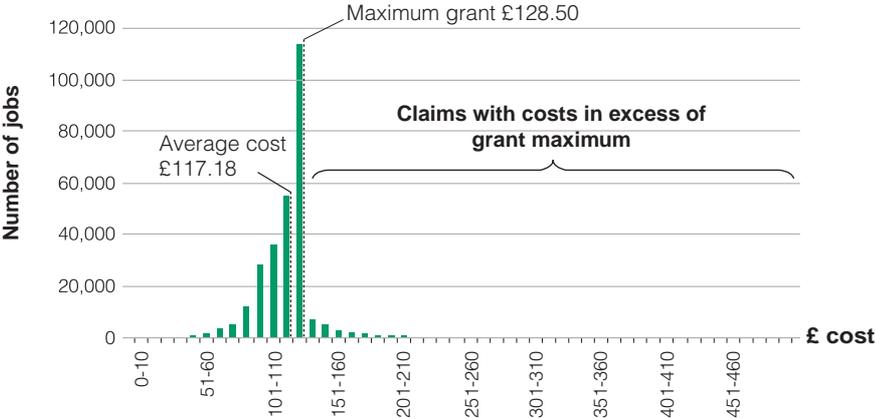
Variations in the cost of work claimed for each of loft insulation, draught-proofing and combined jobs (excluding energy advice) in 1996-97

Figure 24

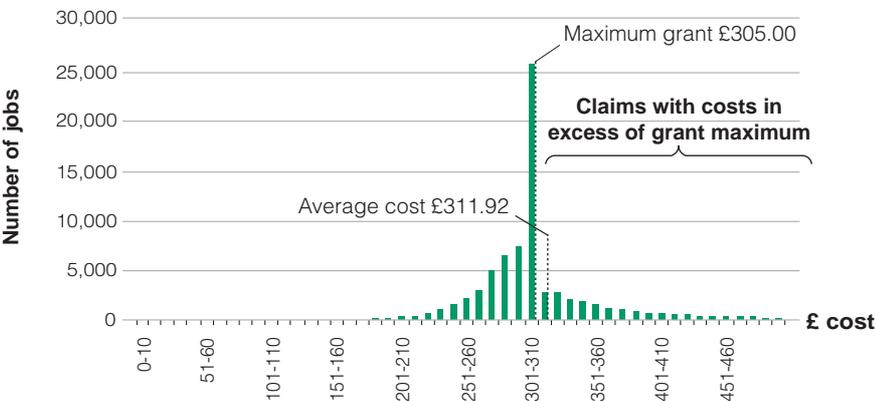
Loft insulation only



Draught-proofing only



Combined jobs



Source: National Audit Office analysis of Eaga's 1996-97 claims database

There was a wide variation in costs, with many claims at or near the grant maximum for each type of work. Where costs exceed the maximum grant, the excess is borne by the installer, householder or a third party such as a local authority where they are the landlord.

National variations in the average costs for labour and materials claimed by installers for loft insulation and draught-proofing, 1996-97

Figure 25

Cost element		Overall average (£)	Highest installer average (£)	Lowest installer average (£)
Loft insulation	materials	114	226	58
	labour	88	174	30
Draught-proofing	materials	43	104	22
	labour	73	161	29

Notes: 1. The figures for loft insulation and draught-proofing include those installed as part of combined jobs.

2. The materials and labour figures do not necessarily relate to the same installers.

Source: National Audit Office analysis of Eaga's 1996-97 claims database

There was a wide variation, both for loft insulation and draught-proofing, in the average costs claimed by installers for labour and materials used in carrying out work.

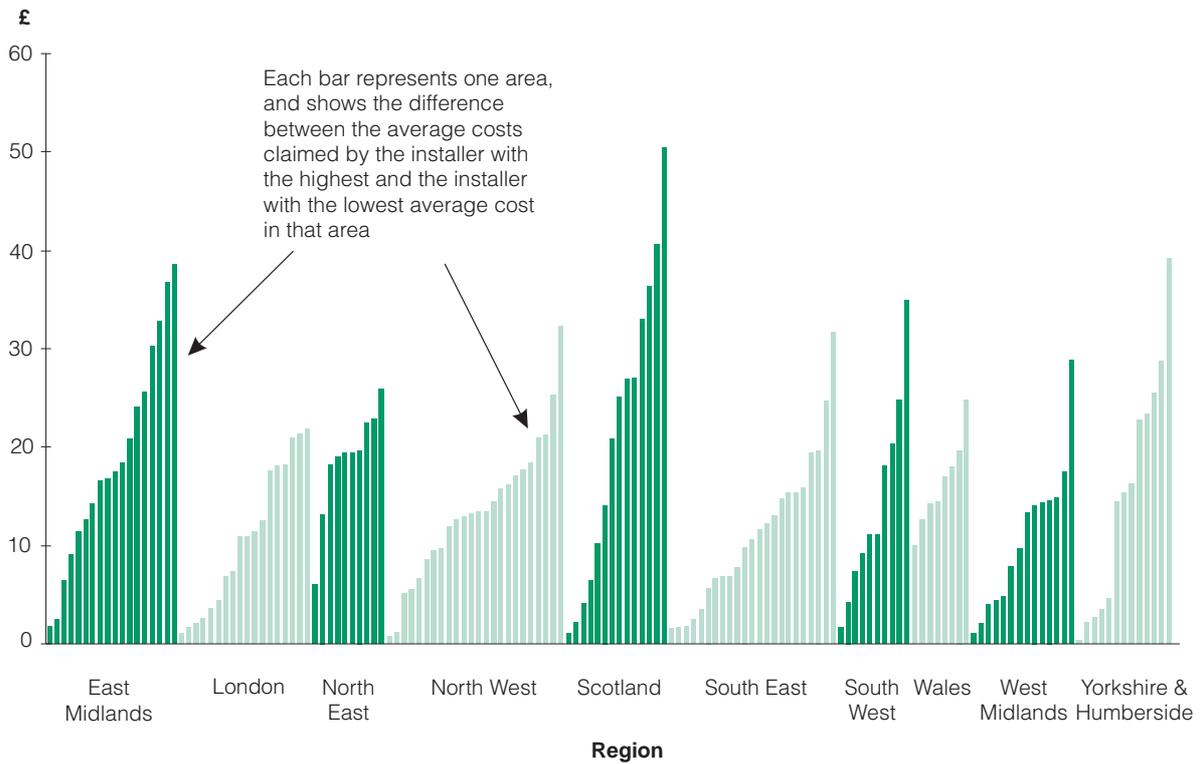
3.53 The National Audit Office discussed these variations with the Department, Eaga, its expert panel and other organisations. The main reasons for variations in the cost of claims were thought likely to be:

- the type, size and age of different properties;
- the cost of materials used by different installers, and their unit labour costs;
- the type of organisation (training organisations may have higher costs);
- the organisation's scale of operation (including non-Scheme related work); and
- the distance to be travelled from the installer's base.

3.54 Thus there will be justifiable variations in the cost of claims submitted by installers. But the National Audit Office also identified examples of variations which warrant further investigation. For example, we examined the difference between the highest and lowest average costs claimed by installers in each area of the country, for draught-proofing a two-bedroomed flat. This analysis found that in some areas this difference was as high as £50, even though the grant maximum was £128.50 and the average cost for this work nationally was £112.53. Scotland, the East Midlands and Yorkshire and Humberside displayed the greatest differences (Figure 26).

Figure 26

Differences in average cost of claim for draught-proofing a two-bedroomed flat, by installers working in the same area



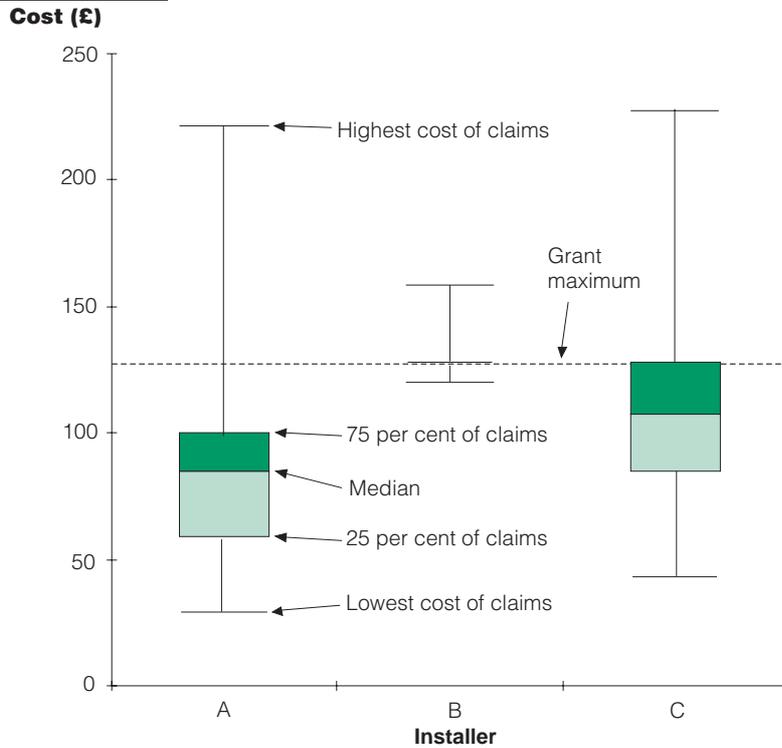
Source: National Audit Office analysis of Eaga's 1996-97 claims database

In some areas installers claimed an average of £50 more than others for draught-proofing a two-bedroomed flat, even though the grant maximum was £128.50. Scotland, the East Midlands and Yorkshire and Humberside displayed the greatest differences between installer costs.

3.55 The National Audit Office also examined variations in the cost of individual claims by installers working in one area. This analysis found considerable differences and variations in the cost of claims submitted by three installers for draught-proofing a two-bedroomed flat. One installer (B) submitted almost all claims at the grant maximum (Figure 27).

Range of costs claimed by three installers operating in one area, for draught-proofing a two-bedroomed flat

Figure 27



Source: National Audit Office analysis of Eaga's 1996-97 claims database

In one area, three installers show considerable differences and variations in the cost of claims for draught-proofing a two-bedroomed flat. One installer submitted almost all claims at the grant maximum.

3.56 Eaga's control over the reasonableness of individual claims has increased (see paragraph 3.49). In addition, Eaga's Technical Monitoring Officers review the cost of work done as part of their physical inspection of a random sample of five per cent of all jobs. Nonetheless, Eaga's systems could be improved still further by the use of computer modelling to identify individual claims where the amount of work (labour or material) would appear to be inconsistent with the type and size of property. Such claims would not necessarily be erroneous or fraudulent; but the degree of variation would be such that they merited attention and possibly inspection.

3.57 The use of such targeted inspections by Eaga would not be unprecedented. Eaga has occasionally carried out inspections in order to gain evidence to claim back amounts already paid to installers, to de-register installers, or to substantiate suspected fraud. This monitoring is not included in Eaga's current routine inspection regime, which is described in the next section. But such systematic targeted monitoring could be integrated into the existing regime.

Conclusions and recommendations

There are significant variations in the cost of the work done under the Scheme, many of which will be entirely reasonable. And Eaga's new controls should help to reduce the variability in costs. Nonetheless, the variations are such that Eaga might consider doing more to check claims and installers whose costs are significantly out of line.

Eaga should explore further the scope to identify costs which warrant further examination, both when assessing installers' rates for work when they apply for appointment and when checking claims for payment. Eaga could apply some of its inspection effort, which is currently random, to focus on claims or installers whose costs appear significantly out of line with what might be expected. Eaga might also consider whether analysis of the variation in costs could help direct more work to those installers with consistently lower costs.

The quality of the work done

3.58 Eaga is required, under its contract with the Department, to inspect each year five per cent of all jobs for which grant is claimed. The five per cent is comparable with the level of inspection carried out in similar schemes run by the electricity companies. Eaga's Technical Monitoring Officers check that the work done by installers meets Eaga's technical standards, including the type and quality of materials, using a checklist of 170 different requirements.

3.59 Eaga's current sampling method tailors the percentage of jobs to be inspected to the volume of jobs done by each installer, to ensure an equal degree of assurance about each installer, but there is no further routine targeting to focus attention on known or persistent risk cases or to reduce inspection rates for installers with a track record of consistently high standards of work. For example, at present an installer with a high pass rate in successive quarters will be inspected at the same rate as a similarly-sized installer with a poor track record.

3.60 Overall, the quality of work done under the Scheme is high. In 1996-97 Eaga's technical monitoring officers inspected 21,800 jobs, of which 2,900 (13 per cent) were judged not to have complied with Eaga's quality standards. This rate of non-compliance has fallen steadily over the life of the Scheme, from 42 per cent in 1991-92. On average, each of the failed jobs had five faults, out of the list of a possible 170 defects against which they were assessed. This represents compliance with 97.1 per cent of Eaga's quality criteria for these jobs, and a 99.6 per cent compliance rate for all jobs.

3.61 Many of the faults identified are minor. Eaga separately identifies only those which may present a potential risk to health and safety, and expects such failures to be rectified immediately. In 1996-97 Eaga estimated that approximately

575 (0.1 per cent) of all jobs done could have led to a potential health risk, although over the life of the Scheme no such incidents have been reported for work carried out under the Scheme.

3.62 Eaga does not identify the impact that sub-standard work may have on the energy efficiency of a property. Whilst recognising that the same fault can have a different impact in different properties, we analysed further a sample of 67 failed jobs. In two (three per cent) of these, insufficient evidence was available to form a view, but in relation to the others:

- 25 per cent had faults which adversely affected the energy efficiency of the property, for example, where more than one door was not draught-proofed or there was incomplete loft insulation;
- 27 per cent had other significant faults, where there had been many infringements, with, for example, incorrect or non-standard material used; and
- 45 per cent had minor or cosmetic faults, for example, where the draught-proofing strips were of the wrong colour given the decor of the room; or work was generally untidy.

If these proportions were repeated across all jobs carried out under the Scheme this would indicate that around six per cent of all jobs would be subject to weaknesses which could have an impact on the energy efficiency of the property - representing around 25,000 jobs in 1996-97. In addition to these cases, there is an unknown number of cases where the Monitoring Officer identified departures from standards but did not fail the job, mainly because he considered the departures to be minimal.

3.63 Since July 1997, the Department has set Eaga a target for the completion of 90 per cent of inspections within 30 days of selection. Over the first three months, July to September 1997, Eaga reported that it inspected 98 per cent of jobs within 30 days.

3.64 Where the Monitoring Officer fails a job the installer must correct the faults before payment is made, after which the Monitoring Officer sends a report confirming the rectification of faults to Eaga following a second inspection. There were significant variations in the length of time before second inspections were carried out. In the 65 failed jobs sampled by the National Audit Office, only ten per cent of these second inspections were carried out within 28 days.

Fifty per cent of cases were re-inspected within 70 days and 75 per cent within 101 days. Eaga does not have data on the reasons for such variations, which may be caused by the installer not returning quickly to rectify the failure, or the inspector not carrying out the second inspection promptly after the work has been rectified.

3.65 The work of Technical Monitoring Officers is in turn audited at least twice a year by Eaga’s Technical Quality Controller. The National Audit Office examined 59 of the 84 audits carried out between May 1995 and February 1997, covering the inspection of 284 jobs. We found that in 25 jobs (nine per cent) the Technical Quality Controller considered that work which had been passed should have been failed; or, where he was present when the inspection was carried out, there were shortcomings in the approach taken by the Technical Monitoring Officer which could have affected the outcome of the inspection. The Technical Quality Controller may also find that a Monitoring Officer has not fully identified imperfections in a job, although he may still agree with the Monitoring Officer that the job is a “pass” or a “fail”. The percentage of such cases rose from 21 per cent in 1994-95 to 25 per cent in 1996-97. The increase was due to the introduction of new technical specifications in 1995 and 1996; and the effect of Monitoring Officers not being allowed to select the areas in which the Technical Quality Controller carried out his work after March 1995.

Conclusion and recommendations

Eaga’s checks on technical quality have helped reduce the proportion of jobs which fall short of standards, from 42 per cent to 13 per cent. But the overall rate of compliance with the technical standards as a whole, at over 99 per cent, is very high.

The Department might consider whether the level of routine inspection it requires is warranted, given the improvements in quality achieved since the Scheme began. Eaga might also investigate the scope for combining a smaller random sample, to give assurance about the Scheme as a whole, with a programme of inspections targeted on work or on specific installers assessed to be most at risk of non-compliance with its standards. Eaga should ensure that inspections are carried out and followed up with greater rigour.

Monitoring customer satisfaction with the Scheme

Customer satisfaction surveys

3.66 Eaga uses customer satisfaction surveys to obtain householders’ views on the quality of work done and of the conduct of installers. Since the start of the Scheme Eaga has carried out eight surveys of all households, three surveys of the over 60s and one survey of those households who paid a contribution to the cost of the work because the cost was greater than the grant maximum. These surveys found that customer satisfaction has been high, with over 95 per cent stating that

they would recommend the Scheme to others; and between 70 per cent and 80 per cent of those surveyed felt that the quality of the work was good. Since July 1997, the Department has set targets for the frequency and extent of such surveys.

3.67 The Building Research Establishment also carried out a survey of households' views of the Scheme as part of its evaluation in 1996 on behalf of Eaga. It found similar high levels of householder satisfaction, with 88 per cent rating the quality of the work as good, and 70 per cent stating the work was worthwhile.

Complaints

3.68 Eaga records and monitors the complaints it receives from both members of the public and installers. It investigates each complaint and decides whether there is any basis to the complaint, in which case the complaint is upheld and action taken. From July 1997, Eaga has been required by the Department to respond to 90 per cent of complaints from claimants within 15 working days. Eaga reported that in the period July to September 1997 it responded to 93 per cent of complaints from householders within that time. Although Eaga has been set no corresponding target for the time within which it should respond to complaints from installers, it seeks to achieve similar standards to those set for complaints from householders.

3.69 Eaga has received very few complaints; some 115 since 1993-94, compared with the 1.7 million households who benefited from the Scheme since then. Of the 104 complaints where decisions had been reached by the time of the National Audit Office examination and sufficient documentation remained to identify the outcome, over half (55 cases) were complaints made by householders about installers. These related mostly to the quality of the work carried out, and waiting times; with a smaller proportion being about overcharging. Some 80 per cent were upheld.

3.70 A further 16 per cent of complaints (17 cases) concerned the Scheme regulations and 21 per cent (22 cases) were about Eaga, mostly from installers who had not been appointed to the Scheme. Complaints about Eaga's handling of the installer appointment process are dealt with internally by Eaga's Complaints and Customer Service Officer, who reports his findings to Eaga's Chief Executive. Some 27 per cent of the complaints against Eaga were upheld.

Similar schemes operated by the electricity companies and local authorities

3.71 The National Audit Office surveyed all the regional electricity companies, and interviewed a small sample of local authorities, to examine the way in which they managed similar schemes.

3.72 From our survey of electricity companies, we noted that they concentrate on low energy lighting, and provide less draught-proofing or loft insulation - to around 30,000 households a year. Their schemes have costs, inspection and failure rates not dissimilar to the Home Energy Efficiency Scheme. Some of the companies use Eaga Services Limited for processing claims and supervision of work. The electricity companies have tended to target specific areas where work can be done in bulk, unlike the Scheme which is available to all those who apply.

3.73 Whilst some local authorities have stopped providing insulation measures, preferring to leave the work to be done under the Scheme, others have continued to provide insulation for their own properties. Some fifty per cent of all Scheme work is done on local authority properties. In such cases, the local authority must give permission, as landlords, before the work can be carried out. Local authorities contacted by the National Audit Office offered a number of views on the Scheme:

- Local authorities told us that they tried to build Scheme work into their own strategic housing programme: in this way they could combine insulation with other planned works, avoiding repeat visits to the same houses and making sure that money was not wasted, for example by draught-proofing windows that were due to be replaced. However, they considered that the Scheme's availability to all who apply sometimes made such co-ordination difficult.
- Those authorities carrying out their own work also believed that this allowed them to focus on areas where properties were in greatest need of improvement, unlike the Scheme which is not targeted.
- Some local authorities also told us they needed to impose their own quality control standards and checks on work done under the Scheme, such as 100 per cent checking or on-site inspection, in addition to those operated by Eaga.

- Some authorities believed that they could achieve lower costs than those paid under the Scheme, by use of local competitive tendering. The prices local authorities quoted from their experience were comparable to the average cost of work done under the Scheme. In most cases the installers who tendered for this work were also registered to do work under the Scheme.

Appendix 1: Insulation measures provided by the Scheme, and rates of grant

Type of work	Installer grant (£)		Materials Only grant (£)	
	Households on qualifying benefit (£)	Those aged 60 or over not on qualifying benefit (£)	Households on qualifying benefit (£)	Those aged 60 or over not on qualifying benefit (£)
<i>Before July 1997</i>				
Loft insulation (including the pipes and tanks in the loft)	198.70	49.68	150.00	40.18
Draught-proofing (including insulating the hot water tank)	128.50	32.13	83.00	22.63
Loft insulation and draught-proofing ("Combined jobs")	305.00	76.25	235.00	62.75
Energy advice	10.00	10.00	-	-
<i>From July 1997</i>				
Grant may be paid for one of the following:				
(a) loft insulation	315.00	78.75	160.00 ²	40.00 ²
(b) cavity wall insulation				
(c) heating controls				
(d) draught-proofing				
In addition, grant may also be paid for any of the following:				
(e) energy advice				
(f) energy efficient lamps				
(g) hot water tank (or cylinder) insulation				

Source: Eaga Limited

Notes: 1. The measures available since July 1997 are ranked according to their energy efficiency characteristics. The choice of measure within each ranking is left to the householder.

2. Materials Only grants are only available for loft insulation, energy efficient lamps and hot water tank (or cylinder) insulation.

Appendix 2: The powers of the Secretary of State to contract out administration of the Scheme

1 Sections 15(5) and 15(6) of the Social Security Act 1990 make specific provision for the Secretary of State to delegate any of his functions in respect of grants under the Scheme, and to pay fees for carrying out those functions. The Act gives the Secretary of State wide general powers to make regulations prescribing the operation of the Scheme and, specifically, for the appointment of an administering agency; for appointment by the administering agency of installers capable of carrying out the work; for allocation of funds to the agency; and for allocation of funds by the agency to individual installers.

2 The duties and powers of an administering agency are outlined by the Home Energy Efficiency Scheme Regulations 1997 (SI 1997, No 790), which replaced earlier regulations with effect from 1 July 1997. Eaga's contract with the Department sets out Eaga's specific responsibilities, and details the performance indicators and standards to be applied to its activities. The performance indicators relate to the efficiency with which Eaga administers the scheme; Eaga's oversight of the quality of work done and control over the funds available for disbursement; and claimant and installer satisfaction. The main terms of the contract, together with the relevant performance indicators, are set out in the table opposite. The current agreement, dated 30 June 1997, includes a broader range of performance indicators than had been included in the earlier contracts, and the new indicators are shown in italics.

The principal responsibilities set out in Eaga’s agreement with the Department	Performance indicators and standards
Paying grant to claimants.	To pay 90 per cent of claims (excluding those selected for inspection) within 15 working days of receipt of the application.
Ensuring that grant is paid only on behalf of eligible applicants.	To sample randomly five per cent of the annual total of applications for compliance with eligibility criteria.
Ensuring that work done complies with minimum quality standards.	To inspect physically a random sample of five per cent of the annual total of applications to assess quality of work and materials and the accuracy of quantities claimed. <i>To complete 90 per cent of physical inspections within 30 working days of selection.</i>
Maintaining financial control and effective record keeping.	<i>To reconcile every six months funds received and paid out - to within 0.5 per cent of the funds received.</i>
Selecting and appointing installers, monitoring installers’ performance, and taking steps to improve performance where necessary. Eaga is also responsible for preparing and maintaining procedures for de-registration or suspension of installers.	
Undertaking publicity for the Scheme, and providing appropriate advice to applicants and installers.	
Assessing satisfaction with the Scheme and its administration.	<p><i>To respond to 90 per cent of complaints from claimants within 15 working days.</i></p> <p><i>To conduct at least one random sample annually of a statistically significant proportion of all claimants to assess their degree of satisfaction with the Scheme and its administration.</i></p> <p><i>To conduct at least one random sample annually of at least 20 per cent of registered installers to assess their degree of satisfaction with the Scheme.</i></p>

Appendix 3: The Department’s consultation exercise: views expressed, and government response

Topic	Views expressed	Government response
Scheme objectives	<ul style="list-style-type: none"> ■ Scheme should remain a social one aimed at reducing fuel poverty ■ Only 3 respondents of the 33 stating an opinion felt that energy savings should be the main objective ■ Of the remaining 30 respondents stating an opinion, views were evenly split between maximising the number of householders and maximising the benefit to individuals 	<ul style="list-style-type: none"> ■ New objective “To secure better standards of energy efficiency, thus reducing fuel costs and increasing comfort, where needed in the homes of elderly, poor and disabled people.”
Grant maxima	<ul style="list-style-type: none"> ■ Funding is insufficient for the demand as evidenced by the increase in the waiting list ■ Additional funding required ■ The Department’s desire to keep the average grant below £160 is incompatible with the new measures 	<ul style="list-style-type: none"> ■ Grant maximum unchanged at £315, and £160 for “Materials Only” jobs
Target setting	<ul style="list-style-type: none"> ■ Fewer than half the respondents commented and those that did had limited suggestions ■ A number felt that increased comfort levels should be a legitimate target but acknowledged difficulties in measuring this 	<p>New targets set for:</p> <ul style="list-style-type: none"> ■ Number of grants made ■ Energy rating improvement per household
Measures available	<ul style="list-style-type: none"> ■ Of the 42 who commented, 14 approved the whole package, 18 approved of some of the measures; whilst 10 opposed it ■ Concerns that draught-proofing would not be selected but is low cost and popular ■ Cavity wall insulation was popular but some doubts over its high cost and how wide ranging its suitability would be ■ Heating controls were not favoured as they are likely to lead to subcontracting 	<p>Choice of measures now:</p> <ul style="list-style-type: none"> ■ If no loft insulation exists the householder can choose between 200mm loft insulation and draught-proofing ■ If less than 80mm of loft insulation the householder can choose between loft insulation top up to 200mm or draught-proofing ■ If more than 80mm of loft insulation, the householder can choose between cavity wall insulation or draught-proofing

continued...

Topic	Views expressed	Government response
Measures available continued...		<ul style="list-style-type: none"> ■ If cavity wall insulation is present or not practicable the householder can choose between heating controls and draught-proofing ■ In addition each householder can have tank insulation, two low energy light bulbs and energy advice
Energy audit techniques	<ul style="list-style-type: none"> ■ Of the 39 commenting, 30 were broadly in favour of some form of energy rating for the property, while the remaining nine were opposed to the principle 	<ul style="list-style-type: none"> ■ Claim form will allow the energy rating of a property to be assessed
Installer system	<ul style="list-style-type: none"> ■ 41 commented; of whom 19 wanted no change to the system and ten felt that there should be more installers and 12 suggested various other changes 	<ul style="list-style-type: none"> ■ Aim that every grant claimant should be able to choose between at least two installers ■ All installers required to provide all measures
Regional variations	<ul style="list-style-type: none"> ■ 23 respondents commented (mainly from Scotland); of these 14 wanted remote area variations, five wanted island supplements 	<ul style="list-style-type: none"> ■ No regional variations; these should be taken account of in the installer's pricing bid
Buildings in multiple occupation	<ul style="list-style-type: none"> ■ 23 commented, of which 15 were in favour of the grants continuing and five suggested changes; whilst three favoured abolition 	<ul style="list-style-type: none"> ■ These grants have been stopped
Repeat grants	<ul style="list-style-type: none"> ■ 25 respondents commented, of these 23 felt that some form of repeat grant should be allowed 	<ul style="list-style-type: none"> ■ Repeat grants not allowed
Part payments	<ul style="list-style-type: none"> ■ 23 respondents expressed an opinion, of those 12 were in favour ■ Some concern was expressed about the ability of the poor to contribute to higher costs 	<ul style="list-style-type: none"> ■ Grants cannot be used to help householders afford a more expensive option
Materials Only grants	<ul style="list-style-type: none"> ■ A majority of the 33 who expressed a view felt that these grants should not be available. These views were mainly held by installers 	<ul style="list-style-type: none"> ■ Grants available for loft insulation, tank insulation and low energy light bulbs
Energy advice	<ul style="list-style-type: none"> ■ 39 respondents commented, of these 30 felt that energy advice should be included as an integral part of the Scheme 	<ul style="list-style-type: none"> ■ All householders must be offered energy advice

Source: Department of the Environment consultation exercise

Appendix 4: The National Audit Office examination - methods

(a) The achievement of objectives and contribution to energy efficiency and social benefits

On the achievement of objectives the National Audit Office:

- identified the current take-up of the Scheme from Eaga records;
- used the methodology at Appendix 5 to estimate the potential for future take-up; and
- estimated the jobs and training opportunities created using the results of a survey of all installers in the Scheme at December 1996 (of the 166 headquarters offices surveyed, 121 replied providing a 73 per cent response rate).

On the contribution to energy efficiency and social benefits the National Audit Office:

- reviewed data from the Building Research Establishment's 1993 and 1996 evaluations of the Scheme, and information from the Energy Saving Trust on the cost and savings generated by different Scheme measures.

(b) Administration and monitoring of the Scheme

On Eaga's financial position the National Audit Office:

- reviewed Eaga's contract and the structure of the administration fee; and
- analysed Eaga's financial statements for 1991-92 to 1996-97.

On the selection and appointment of installers and the allocation of work the National Audit Office:

- analysed the numbers of installers moving on and off the holding list during the four rounds of invitations between January 1995 and January 1997;
- reviewed the applications received for six appointments for installers which arose in March 1996;
- reviewed the applications received for 16 appointments for installers which arose in July 1997; and
- reviewed the allocation of funds to all installers in the second quarter of 1996-97.

On timeliness the National Audit Office:

- compared average annual estimates of waiting times reported by installers with changes in demand for the Scheme between 1993-94 and 1996-97; and
- calculated the average time Eaga took to pay valid claims from installers using data from Eaga's claims database.

On the reasonableness of work done, and its cost the National Audit Office:

- examined a sample of 123 inspections (56 passes and 67 fails) carried out by Eaga's Technical Monitoring Officers in 1996-97 to determine the extent to which claims were queried on the grounds of cost;
- compared the bid prices made by a sample of 30 installers at the time they were appointed with the average cost of claims they submitted in 1996-97 to determine the level of variation;

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- analysed all claims made in 1996-97, using Eaga's claims database to identify:
 - i) the range of costs claimed for different measures;
 - ii) the average variation in the materials and labour costs charged by installers;
 - iii) the influence of the size, type and age of property on the level of costs claimed; and
 - iv) examples of anomalous costs.
- surveyed 115 installers on the extent of work carried out on one particular job in the last six months of 1995-96 (84 installers replied providing a response rate of 73 per cent); and
- surveyed a further 13 installers for information about the extent of work carried out on each of 15 jobs carried out in the first six months of 1996-97 (of the total number of 195 jobs for which information was requested, valid data was received for 145, providing a response rate of 76 per cent).

On the quality of work done the National Audit Office:

- examined Eaga's 1996-97 inspections database to identify the level of jobs failed;
- reviewed a sample of 65 jobs failed by Technical Monitoring Officers in 1996-97 to:
 - i) assess the extent to which failed work would have affected the energy efficiency of the property; and
 - ii) identify the extent to which they had been re-visited within the target time.
- examined 59 out of the 84 audits of Technical Monitoring Officers carried out by Eaga's Technical Quality Controller between 1994-95 and 1996-97, covering 281 inspections in total.

On customer satisfaction the National Audit Office:

- analysed the results of customer satisfaction surveys carried out by Eaga and the Building Research Establishment; and
- reviewed the reasons for, and the outcome of, 104 of the 115 complaints received during the life of the Scheme where a decision had been reached and appropriate data were available.

(c) The National Audit Office also:

- reviewed a variety of other reports and documents produced by Eaga, the Department of the Environment, Transport and the Regions, the Energy Saving Trust, NEA and other organisations with an interest in energy efficiency;
 - sought to identify different perceptions of the Scheme from a variety of bodies with an interest in the Scheme and in domestic energy efficiency; and
 - took advice on a number of aspects of the Scheme from a panel with expertise in the provision of domestic energy efficiency measures.
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Appendix 5: Estimating the remaining population eligible to receive grants under the Scheme at March 1997

Key steps	Key estimates	Estimate (millions)
<i>1. Identify housing stock lacking draught-proofing and/or loft insulation at the start of the Scheme in 1991.</i>		
i) The total housing stock in Great Britain was identified from the English House Condition Survey 1991, and the Building Research Establishment's Domestic Energy Fact Files for Wales and Scotland.	Total housing stock in 1991.	22.3
ii) The number and proportion of the total housing stock without draught-proofing or loft insulation in England was identified from the English House Condition Survey Energy Report 1991, both by tenure type and as a total. The figures for loft insulation included properties with no insulation and properties with less than 50 millimetres of insulation (which are also eligible for grant under the Scheme). Similar information for Wales and Scotland was not available and therefore estimates were calculated by applying the proportions of properties by tenure type in England without draught-proofing and loft insulation to the total housing stock figures by tenure type for Wales and Scotland.	Total housing stock without loft insulation and/or draught-proofing in 1991.	19.4
iii) The House Condition Survey Energy Report provides totals for properties without loft insulation and draught-proofing in isolation, but does not identify how many properties require both. The estimate at (ii) therefore was likely to include some double counting. The National Audit Office estimated that this was of the order of some 21 per cent given that the number of grants paid under the Scheme for combined jobs was of the same proportion. The National Audit Office removed the double counting to arrive at an estimate of the total number of properties requiring draught-proofing and loft insulation and those requiring loft insulation alone.	Total housing stock without loft insulation and/or draught-proofing in 1991 (double counting removed).	15.8
<i>2. Identify the number of households eligible to receive grant because of receipt of benefit in 1991.</i>		
iv) Households in receipt of certain state benefits are eligible to receive grant under the Scheme. Using the Social Security Statistics the National Audit Office identified the number of households in receipt of Income Support and Community Charge Benefit in Great Britain in 1991. These were the two most widely claimed benefits at the time and were taken as a reasonable approximation of the number of households eligible to benefit from the Scheme (some of whom may also receive other qualifying benefits), in order to avoid double counting.	Total number of households in receipt of benefit in 1991.	7.4

continued...

Key steps	Key estimates	Estimate (millions)
continued ...		
v) The number of properties occupied by households receiving benefit who lacked loft insulation or draught-proofing in 1991 was estimated by applying the percentage of the total housing stock occupied by such households in England, Wales and Scotland (33 per cent; 33 per cent; and 40 per cent respectively) to the total number of properties in each country (13.6 million; 0.79 million; and 1.5 million) which make up the figure at (iii) for the total number of properties without loft insulation and/or draught-proofing.	Total number of properties requiring loft insulation and/or draught-proofing occupied by households in receipt of benefit in 1991.	5.3
<i>3. Determine the growth in the number of households receiving benefit between 1991 and 1997.</i>		
vi) Based on data from the Social Security Statistics, the National Audit Office estimated that between 1991 and 1997 the total number of households receiving qualifying benefit grew by some 18 per cent. The National Audit Office assumed that the number of households receiving benefit whose properties lacked loft insulation or draught-proofing would have grown by the same proportion. This growth was applied to the figure at (v).	Total number of households receiving benefit, and whose properties lacked loft insulation and/or draught-proofing, in 1997.	6.2
<i>4. Identify the number of households receiving benefit who remain to take up the Scheme in 1997.</i>		
vii) Between the start of the Scheme and March 1997 some 1.7 million households receiving benefit have taken up the Scheme. The National Audit Office estimated the total number of households still to benefit from the Scheme by subtracting this total from the figure at (vi).	Total number of households in receipt of benefit still to take up the Scheme from 1997.	4.5
<i>5. Identify the number of over 60s households in 1994.</i>		
viii) Households where one of the occupants is over 60 are also eligible to receive grant under the Scheme. Using data from the Department of Social Security Annual Reports and the English House Condition Survey, the National Audit Office identified the number of over 60s households in Great Britain in total and by tenure type as at 1994, when they first became eligible to take up the Scheme. In arriving at the total, wives on their husband's insurance were excluded on the assumption that they would be living at the same address. Pensioners in receipt of benefit were also excluded as they would have been included in the totals for households in receipt of benefit above.	Total number of over 60s households in 1994.	5.9
<i>6. Determine the number of over 60s households in properties lacking loft insulation and/or draught-proofing in 1994.</i>		
ix) The proportion of properties in each tenure type lacking loft insulation and/or draught-proofing were applied to the estimated numbers of over 60s households in each of these tenure types to identify the total number of over 60s households who would benefit from the Scheme. The problem of double counting was addressed in the way described in (iii).	Total number of over 60s households without loft insulation and/or draught-proofing in 1994.	4.3
		continued...

The Home Energy Efficiency Scheme

Key steps	Key estimates	Estimate (millions)
continued ...		
<i>7. Determine the growth in the number of over 60s households between 1994 and 1997.</i>		
x) Using the Office for National Statistics' Annual Abstract of Statistics, and the Office of Population Censuses and Surveys' Population Trends, the National Audit Office calculated that the growth in the number of over 60s households was only some 0.2 per cent between 1994 and 1997. The National Audit Office assumed that the number of such households lacking loft insulation and draught-proofing would have grown by the same rate.	Total number of over 60s households lacking loft insulation and/or draught-proofing in 1997.	4.3
<i>8. Identify the number of over 60s households who remain to take up the Scheme in 1997.</i>		
xi) Between April 1994 and March 1997 some 0.5 million over 60s households have taken up the Scheme. The National Audit Office estimated the total number of households still to benefit from the Scheme by subtracting this total from the figure at (x).	Total number of over 60s households who remain to take up the Scheme from 1997.	3.8 ¹
Total number of eligible households still to take up the Scheme from 1997 [(vii) + (xi)]		8.3¹

Note: 1. Between April 1997 and September 1997 a further 0.24 million householders have benefited from the Scheme, the vast majority of whom are householders on benefit.