

BSE: The Cost of a Crisis



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.

John Bourn
Comptroller and Auditor General

National Audit Office
23 June 1998

The Comptroller and Auditor General is the head of the National Audit Office employing some 750 staff. He, and the National Audit Office, are totally independent of Government. He certifies the accounts of all Government departments and a wide range of other public sector bodies; and he has statutory authority to report to Parliament on the economy, efficiency and effectiveness with which departments and other bodies have used their resources.

For further information about the National Audit Office please contact:

National Audit Office
Press Office
157-197 Buckingham Palace Road
Victoria
London
SW1W 9SP

Tel: 0171-798 7400

email: nao@gtnet.gov.uk

Web site address: <http://www.open.gov.uk/nao/home.htm>

Contents

Executive summary	1
<hr/>	
Part 1: Background to the crisis and scope of the study	
Announcement on 20 March 1996 and subsequent events	9
Responsibility for Government action on BSE	15
Expenditure on BSE	16
Parliamentary concern	18
Scope and methodology of the National Audit Office examination	18
<hr/>	
Part 2: The Over Thirty Month Scheme	
Introduction	21
Nature and size of the scheme	22
Procurement of slaughtering and rendering services	26
Support payments to farmers	35
Systems for processing and paying claims	44
<hr/>	
Part 3: Other schemes and market support measures	
Introduction	51
Calf Processing Aid Scheme	52
Other support measures	56
Selective Cull	59
Cattle traceability	67
Other schemes	71
<hr/>	
Part 4: Administrative and other issues	
Introduction	75
Incineration and disposal	75
European Union reimbursements	83
Exit strategy	86
Special investigations	87
Impact of the BSE crisis on staffing	89
Glossary	92
Appendices	
1: History of Bovine Spongiform Encephalopathy	94
2: Review of short term market support measures	101
3: Comments from sectors of the beef industry	110
Chronology	119

Expenditure on BSE-related Schemes 1996-97 and beyond

Measures As at 31 December 1997	1996-97 £ million Actual	1997-98 £ million Forecast	Continuing beyond 1997-98?
New Schemes			
Over Thirty Month	858	392	yes
Calf Processing Aid	51	54	yes
Selective Cull	0.1	119	yes
Beef Marketing Payment	58	Nil	no
Slaughtering Industry (Emergency Aid)	81	5 ⁽¹⁾	no
Rendering Industry Support	87	69	no ⁽²⁾
Beef and Beef Products (Storage and Disposal) Services	1	2 ⁽¹⁾	no
Feed Recall	0.3	1 ⁽¹⁾	no
Hide Industry	4	3	no
Beef Assurance	1	1	yes
Extensions to Existing Schemes			
Beef Special and Suckler Cow Premium Top Ups	120	8	no ⁽³⁾
Hill Livestock Compensatory Allowances	60	Nil	no ⁽³⁾
Purchases into Intervention	170	180	yes
Administration and other			
Cost of administration, including physical controls and design of new systems or schemes such as Cattle Traceability, Certified Herd and Date-based Export Schemes.	73	71	yes
Research into BSE	10	12	yes
Beef Promotion	Nil	3	no
Total	1,574	920	

- Notes: 1. Cost of storage and disposal.
2. But some £1 million residual payments are expected to be made in 1998-99.
3. The main schemes continue but payments under them are not BSE related. Additional payments in 1996-97 reflected temporary increases in direct response to the crisis.
-

Executive summary

Introduction

1 On 20 March 1996, the Secretary of State for Health announced the possibility of a link between Bovine Spongiform Encephalopathy (BSE) in cattle and a new variant of Creutzfeldt-Jakob Disease (CJD) in humans. The same day, the Minister of Agriculture, Fisheries and Food announced the Government's acceptance of scientific advice on measures to reduce the risk to human and animal health. And on 3 April 1996 he announced his decision to exclude all cattle over 30 months old from the food chain. The Government required the development of a scheme, in negotiation with the European Union, to provide for the slaughter of such cattle and the safe disposal of the carcasses, to prevent the collapse of the beef industry, and to pave the way for the lifting of the ban imposed by the European Union on the export of British beef and beef products. The pressure on the Ministry and the Intervention Board at that time to respond quickly and effectively to this catastrophe was intense. There was no precedent for this situation, which struck uncertainty and fear into thousands of farmers, hundreds of companies in the trade, and millions of consumers.

2 The resulting Over Thirty Month Scheme was accompanied by eight new schemes designed to support different elements of the industry, and a further scheme to meet the European Union requirement for a selective slaughter programme that would reduce more quickly the incidence of BSE. Implementation of these schemes is the responsibility of the Ministry, the Intervention Board Executive Agency and Agriculture Departments in Scotland, Wales and Northern Ireland.

3 In 1996-97, expenditure on BSE-related schemes amounted to £1.5 billion (see Figure opposite). Of which some £0.8 billion was eligible for reimbursement from the European Union, subject to compliance with regulations. Further expenditure of £1.9 billion is expected between 1997 and 2000. Between April 1996 and September 1997, these schemes involved the slaughter of 2.6 million animals.

4 In this report the National Audit Office examines:

- How the Ministry and Intervention Board have implemented the Over Thirty Month Scheme, which accounts for nearly 60 per cent of total BSE-related expenditure;

- The main features of other schemes; and
- Administrative matters where the Ministry is still facing difficulties.

Some of these measures are now intended to help secure the lifting of the European Union ban on the export of British beef and beef products, and this is noted where applicable.

The Over Thirty Month Scheme

5 The ban on sale of over thirty month cattle for human consumption has the objective of safeguarding consumers. The Over Thirty Month Scheme has the dual purposes of protecting public health and supporting the beef industry. The scheme provides financial support by enabling the Board to purchase bovine animals over 30 months old when they reach the end of their useful lives, slaughter them, and dispose of the carcasses safely, mainly by rendering and incineration. Sale of animals into the scheme is voluntary - farmers may choose to keep their animals for milking or breeding. [Paragraphs 2.2 to 2.5]

6 The Ministry and the Board had to set up the scheme within a very short time and under extreme pressure, to meet urgent political worry and concern. In doing so, they had to deal with problems arising from the large number of animals eligible for entry to the scheme and the insufficient capacity of rendering, incineration and storage facilities. The European Union Regulations came into effect on 29 April 1996 and the scheme was fully operational by early May 1996. By November 1996 the Board had increased the weekly slaughter rates from 25,000 to 60,000 and by March 1997 had arranged for the slaughter and disposal of about 1.35 million cattle. [Paragraphs 2.6 to 2.11, 2.51]

7 The National Audit Office regard these as impressive results in the circumstances; but they were achieved at considerable cost to the UK and European Union taxpayer, especially in the early stages. The scheme is now one of the pre-conditions for lifting the export ban. The National Audit Office's main findings and conclusions on different aspects of the scheme are as follows:

On the selection of and payments to abattoirs

8 The Intervention Board was instructed by Ministers to implement the scheme quickly, because of its importance to the beef industry and the backlog of animals to be slaughtered. Therefore, although there was overcapacity in the abattoir sector, the Board did not at the outset select abattoirs through competitive tendering which would have delayed commencement of the Scheme by at least three months. The Board instead sought to identify those that could deal with the level of throughput and reach the standard of work required. There was no evidence that the Board acted other than impartially in selecting abattoirs for participation in the scheme and industry representative associations were consulted about operation of the scheme. [Paragraphs 2.6, 2.13 to 2.21]

9 Because there was no competitive tender, the Board set the slaughter fee after negotiation with the industry. This fee was set at £87.50 per animal on a provisional basis pending an open books examination of the industry's costs; it was reduced to £41 in August 1996. Total slaughtering fees were £71 million in 1996-97. Competitive tendering was initiated in December 1996, when the backlog of animals awaiting slaughter had been effectively cleared, eight months after the scheme began. The Board gave priority to eliminating the backlog before the winter of 1996, to reduce the risk of animal welfare problems and financial difficulties for farmers. The average fee of £25 as a result of competition came into operation in July 1997. [Paragraphs 2.22 to 2.29]

On fees for rendering

10 In contrast to the abattoir situation, there was a shortage of capacity in the rendering sector*. This made the Board reliant on the sector for early progress in dealing with the backlog of animals for processing. At the start of the scheme, the Board therefore negotiated with renderers an initial fee of £105 per tonne, pending a review of costs. Following this, the Board negotiated agreements with financial incentives from October 1996 to maximise throughput, rightly in the National Audit Office's view. New contracts and prices were negotiated with renderers in January 1997, to take account of the need to render the large stocks of frozen carcasses in store. It was not until January 1998 that the Board was able to benefit from competitive tenders from individual renderers. This led to savings of some £5 million a year on amounts paid to five rendering companies. [Paragraphs 2.30 to 2.34]

* Rendering is the process of boiling down the remains of cattle and other animals to produce meat and bone meal and tallow

On compensation to farmers

11 In 1996-97 the Board made compensation payments of £670 million to farmers under the Over Thirty Month Scheme. The rate of compensation was set by the European Union at the start of the scheme at one ECU per kilogram for animals presented through markets (liveweight); the rate for animals presented directly to abattoirs (deadweight) was initially set at twice the liveweight rate, because carcasses are lighter than live animals. However, this ratio, while reasonably accurate for dairy cows, was too generous for beef animals. This meant that farmers who presented such animals directly to abattoirs were over-compensated. This position was corrected by the European Commission after the first three months of the scheme, by which time additional costs of some £15 million had been incurred. [Paragraphs 2.36 to 2.43]

12 By September 1997 the value of compensation payments to farmers had fallen substantially, for four reasons:

- adjustments in the compensation rates in line with falling market prices;
- successive reductions in the rates used to convert EU payments into sterling;
- the introduction of maximum compensation weights for cattle in August 1997, which has reduced the incentives for farmers to retain (heavier) beef cattle for entry into the scheme, or to fatten up ex-dairy cows; and
- the reduction in the deadweight rate for beef cattle described above.

13 The Board implemented an effective range of measures to enable it to boost the weekly slaughter rate to over 60,000 animals, and eliminate the backlog by December 1996. In addition, it offered advance payments to farmers in view of the difficulty they faced at first in getting their animals into the scheme. The arrangements applied only for one month, but the National Audit Office considers it unsatisfactory that of the advances made in July 1996, £2.6 million remained outstanding at September 1997. By the end of March 1998, the situation had improved so that £1.5 million remained due, of which £0.3 million was covered by agreements to repay in instalments. [Paragraphs 2.45 to 2.57]

14 The Board hoped to introduce a computerised system for processing and paying Over Thirty Month Scheme claims within a few months of the scheme becoming operational in May 1996. However, the nature of the task changed substantially and the full requirements were not established until October 1996. The system did not become operational until almost a year later, in August 1997. An interim system gave rise to various difficulties for claimants and the Board,

including validation of claims, reconciliations and accounting for expenditure. The National Audit Office examined a sample of payments and found clerical mistakes in over 40 per cent of the sample of payments made to abattoirs. The results suggested a possible error of 0.17 per cent of the total compensation payments to farmers in 1996-97. [Paragraphs 2.59 to 2.69]

Other BSE-related schemes

On other support measures

15 The Ministry and the Board put into operation a wide variety of other schemes, which included short-term support to specific sectors of the industry - for example, beef marketing, slaughtering and rendering; the collection, storage and disposal of unsaleable beef products and feed; and increased expenditure on existing schemes such as the Beef Special Premium and Suckler Cow Premium Schemes. [Paragraphs 3.13, 3.14, Appendix 2]

16 The National Audit Office found that there was no overlap in these schemes, although some sectors of the industry received aid from more than one scheme in support of different aspects of their trade. The Ministry had set appropriate eligibility criteria for each scheme and had obtained the appropriate statutory authority. For some schemes, the Departments relied initially on the authority of the Appropriation Act. Treasury approval was also given, although the Ministry was late in obtaining Treasury authority for the aid to the hide industry scheme. [Paragraphs 3.15 to 3.17]

On the Calf Processing Aid Scheme

17 This scheme, for which European Union legislation was introduced in 1992, is aimed at reducing the supply of beef by compensating farmers for the slaughter and disposal of very young male calves. Up to the end of September 1997 over 800,000 calves had been slaughtered, at a cost of some £75.4 million. This aid is fully reimbursable by the European Union. [Paragraphs 3.5 to 3.9]

18 The National Audit Office found that the scheme had been appropriately implemented under relevant European Union regulations; and that while errors in claims had occurred, checks carried out by the Board and action taken to address weaknesses were adequate. [Paragraphs 3.10 to 3.12]

On the Selective Cull

19 Soon after 20 March 1996, pressure for the United Kingdom to operate a selective cull, with the objective of speeding the elimination of the disease, was applied by the European Commission. This reflected the views in other member states. However, calculations by the Ministry indicated that a selective cull on its own would have only a very limited effect on the epidemic. But the concept had also to be viewed against the political situation, in particular the desirability of reducing political confrontation in Europe and finding a way forward which could lead to the lifting of the ban on United Kingdom exports. It was for these reasons that proposals for a selective cull were included in the United Kingdom eradication programme, approved by the European Standing Veterinary Committee on 19 June 1996, which formed an integral part of the Florence agreement reached by the European Council on 21 June 1996. However, the final decision by the United Kingdom to proceed was not taken until December 1996. [Paragraphs 1.8, 3.20]

20 The Selective Cull aims to identify animals most at risk of contracting BSE - those born at about the same time and within the same herds as confirmed BSE cases, and which might therefore have eaten the same contaminated feed. [Paragraphs 3.19 to 3.22]

21 The scheme was affected by: the difficulty of tracing confirmed BSE animals back to their natal herds; and the fact that there was no requirement to keep birth records for animals born before October 1990. In addition, the cull did not include cattle born at the same time as cases of BSE confirmed after 1996 or cases in cattle born after June 1993. On the other hand, any extensions to the cull would be of only limited effectiveness in further reducing the incidence of the disease. [Paragraphs 3.23 to 3.32]

22 Compensation payments to farmers under this scheme are significantly greater than those under the Over Thirty Month Scheme. In addition, because payments are based on the market price for young animals, farmers may receive more for older animals than if they had been able to sell them on the open market under normal conditions. [Paragraphs 2.50, 3.33 and 3.34]

On cattle traceability

23 A system for identifying animals and recording their movements was another of the European Union's requirements for lifting the export ban on British beef. It is clear that the systems in place before the BSE crisis for tracing animals for disease control purposes, while adequate for their purpose at that time, were not suitable for the more demanding task of implementing the Selective Cull. A computerised traceability system would have enabled the Ministry to act more effectively. The Ministry is now addressing this problem through the institution of cattle passports and the development of a computerised cattle traceability system. [Paragraphs 3.37 to 3.48]

Administrative and other issues

On the incineration and disposal of stored meat and bone meal

24 The Intervention Board is facing significant problems over the disposal of meat and bone meal. Almost 260,000 tonnes of this material was in storage at the end of September 1997, at a cost by that date of £7 million (excluding transport), and it is likely to increase by at least 65,000 tonnes a year. Efforts by the Board to obtain sufficient incineration capacity at reasonable cost have not been successful. Expert advice is that it is safe to landfill meat and bone meal. This would be a cheaper option but would need European Union approval as the Over Thirty Month Scheme regulations are interpreted by the European authorities as requiring incineration. The Board is currently reviewing disposal options, concerning stocks of meat and bone meal which may take five years to dispose of. [Paragraphs 4.5 to 4.13]

On reimbursements from the European Union

25 The reimbursements due under the Over Thirty Month Scheme are dependent on the destruction of each animal - interpreted by the European authorities as requiring incineration. Because of the capacity problems described above, this condition posed problems for the Ministry, and they negotiated an agreement whereby 80 per cent of the European Community contribution would be paid after the animal had been rendered. [Paragraphs 4.17 to 4.18]

26 Because of practical problems in reconciling the quantity of rendered materials with the number of animals slaughtered, the Board cannot substantiate the numbers of carcasses on which to base claims for payment. Where there were discrepancies, the Board used only those figures which could be fully substantiated when claiming payments. The National Audit Office concluded that, as a result, the United Kingdom taxpayer may have been disadvantaged. [Paragraph 4.20]

27 While the Board expects that further development of its payment system will provide a sound base for future claims, the final 20 per cent reimbursement from the European Union will not become available until the stocks of meat and bone-meal are incinerated. [Paragraphs 2.59 to 2.60, 4.20]

On an exit strategy from the Over Thirty Month Scheme

28 The National Audit Office looked at the scope for an exit strategy for this scheme, in view of the size and ongoing nature of the expenditure involved. Such a strategy might assist farmers to plan with greater certainty for the future. Possibilities identified by the National Audit Office included gradually reducing the value of support payments, setting a cut-off date for animals which are eligible, or closing the scheme only when the export ban or the ban on the sales of over thirty month meat for human consumption are lifted. However, the Ministry is not free to determine the nature or timing of an exit strategy. Any changes to the Scheme must be approved by the European Union and have to meet its requirements for reimbursement of expenditure and the conditions for lifting the export ban. In addition, the implications for the industry of such changes and scientific advice on the protection of public health are also essential factors. [Paragraphs 4.21 to 4.23]

On staffing

29 With the size of the crisis and the pressure to make early progress, it is not surprising that significant extra staff have been required - for example, staff at the Intervention Board increased by 331 (36 per cent) between March 1996 and September 1997, and staff numbers in the relevant divisions of the Ministry and its agencies rose by over 600 (15 per cent). The speed at which extra staff were transferred or recruited, and the need to train them, may have impacted on the efficiency and effectiveness of administration in the initial stages of the new schemes. [Paragraphs 4.28 to 4.33]

Part 1: Background to the crisis and scope of the study

Announcement on 20 March 1996 and subsequent events

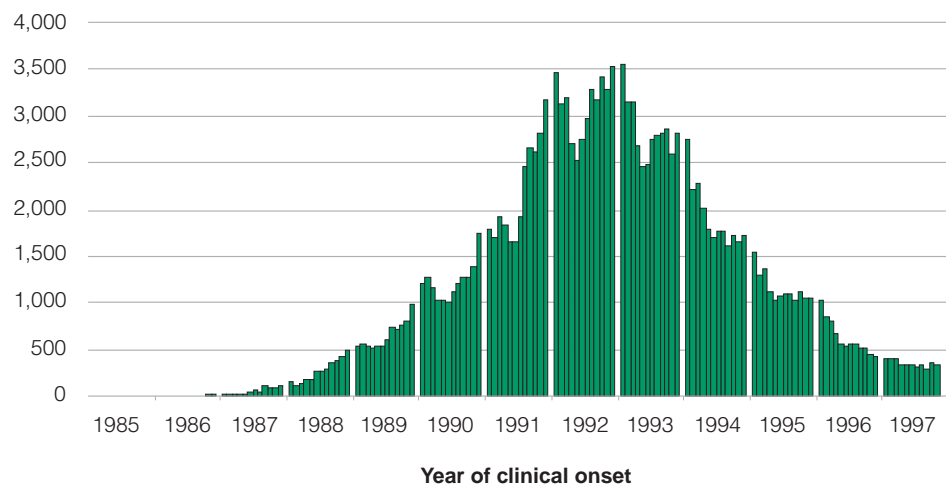
1.1 Bovine Spongiform Encephalopathy (BSE) was first identified by the Ministry of Agriculture, Fisheries and Food in November 1986. Subsequent early research by the Institute for Animal Health confirmed that BSE was a member of a group of diseases called Transmissible Spongiform Encephalopathies which includes scrapie, an endemic disease of sheep. Further early work by the Ministry indicated that cattle were likely to have contracted the disease from animal feed containing meat and bone meal infected with the scrapie agent. And that the incidence of the disease was increased by the subsequent recycling of cattle material infected with BSE processed into meat and bone meal which was then used in animal feed, allowing cattle to cattle infection. Appendix 1 of this report summarises the history of BSE.

1.2 Over 170,000 cases of BSE in cattle were confirmed from 1986 to 1997, with a peak in 1992 of some 37,000 cases (Figure 1). The annual number of cases has fallen significantly to some 4,000 in 1997, following the ban in July 1988 on the use of ruminant protein in ruminant feed.

Confirmed cases of Bovine Spongiform Encephalopathy since 1985 based on month and year of onset of clinical signs

Figure 1

Number of cases



Source: Ministry of Agriculture

The number of cases of BSE reached a peak in 1992

1.3 On 20 March 1996 the Secretary of State for Health made a statement to the House of Commons about the advice received that day from the Spongiform Encephalopathy Advisory Committee. This Committee was first appointed in 1990 to provide independent advice to the Ministry of Agriculture, Fisheries and Food and the Department of Health. After considering work being done by the National Creutzfeldt-Jakob Disease Surveillance Unit at the Western General Hospital in Edinburgh, which specialises in monitoring cases of Creutzfeldt-Jakob Disease (CJD), the Advisory Committee concluded that, although there was no direct evidence of a link, the most likely cause of the new variant of CJD was exposure to BSE, before 1989.

1.4 Against this background the Advisory Committee made a number of recommendations (Figure 2) which the Government accepted in full. The same day and immediately following the Secretary of State's statement, the Minister of Agriculture, Fisheries and Food announced the Government's acceptance of specific measures recommended by the Advisory Committee to reduce further the risk to human and animal health from BSE and his intention to put them into operation as soon as possible.

**Conclusions reached by
the Spongiform
Encephalopathy Advisory
Committee on
20 March 1996**

Figure 2

It was imperative that current measures to protect public health were properly enforced. In particular, the Committee recommended constant supervision to ensure the complete removal of the spinal cord of slaughtered cattle.

The Committee also recommended :

- that carcasses from cattle over 30 months should be deboned in licensed plants supervised by the Meat Hygiene Service and the trimmings classified as specified bovine offal (that is kept out of the food chain);
- a prohibition on the use of mammalian meat and bone meal in feed for all farm animals;
- that the Health and Safety Executive and the Advisory Committee on Dangerous Pathogens should urgently review their advice in the light of the new findings; and
- that the Advisory Committee urgently consider what further research was necessary.

The Advisory Committee did not consider that these findings led it to revise its advice that milk was safe to drink.

The Advisory Committee concluded that, if its recommendations were carried out, the risk from eating beef was likely to be extremely small.

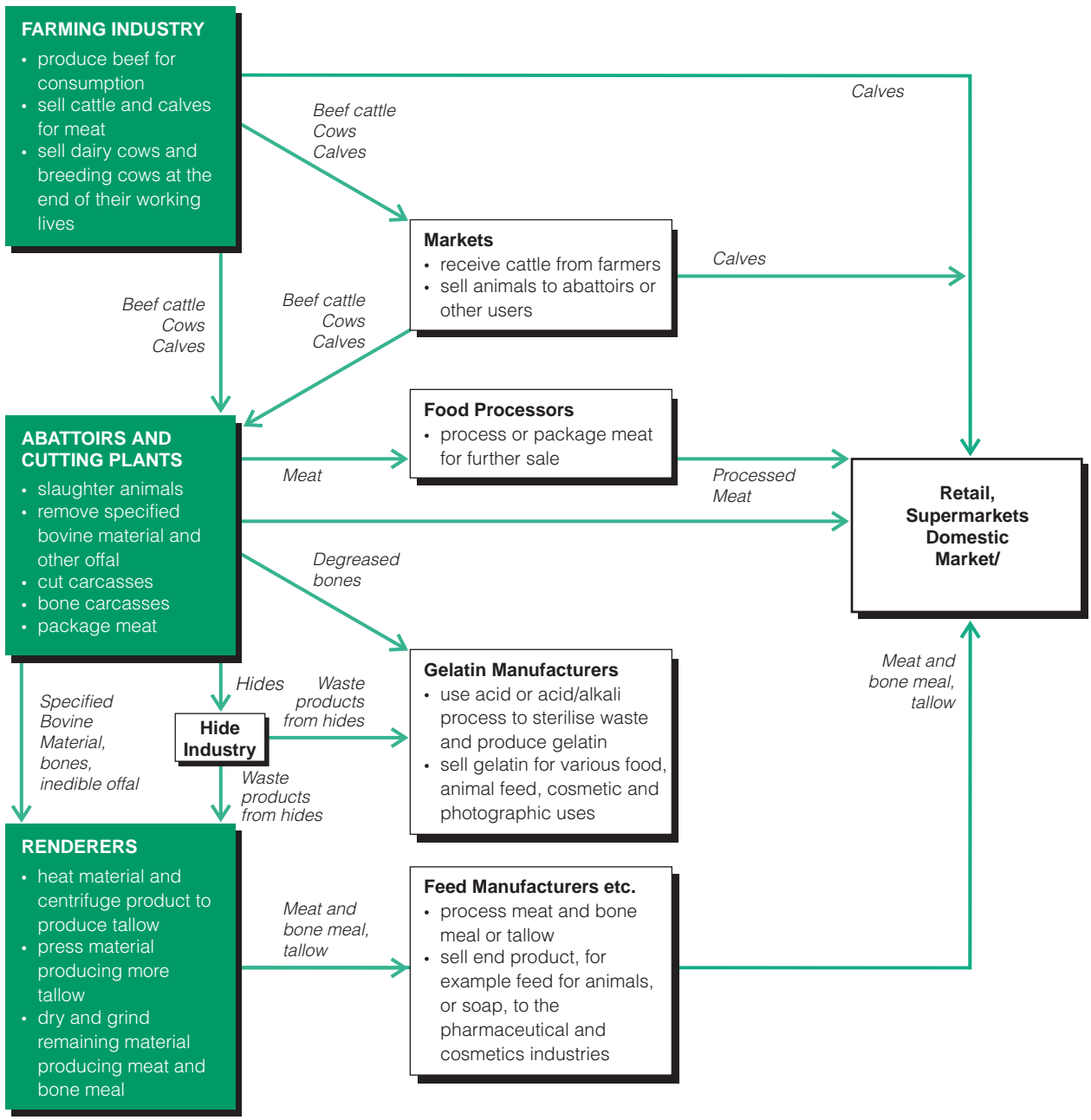
The Advisory Committee concluded that, if its recommendations were carried out, the risk from eating beef was likely to be extremely small.

1.5 Following these announcements, there was immense pressure on Governmental and private sector organisations involved in the regulation and operation of the beef industry and on individuals within those organisations. This pressure was heightened by a suspected but unproved link between BSE and new variant CJD; initial fears about the nature and extent of products which might be affected by the BSE agent; and the demand from consumers, industry, Parliament, the media, the European Union and others for explanations and action. These demands were for action which would be both urgent and effective in dealing with a problem which had no immediate solution and which involved scientific research, farming practice, public health and public perceptions and the livelihoods of those employed in the industry.

1.6 As a consequence of the announcements in March 1996, public confidence that beef was safe to eat diminished sharply and the industry fell into considerable disarray. This lack of confidence was reflected throughout Europe. The situation worsened, with many countries outside the European Union introducing import bans. Then, on 27 March 1996, the European Union banned the export of British beef and beef products to Europe and to the rest of the world. This trade was worth some £520 million annually. While the main impact of the crisis was on the beef sector, it also had a significant effect on milk production and milk exports. The nature of the UK beef industry and its main elements prior to the crisis are shown in Figure 3.

1.7 On 3 April 1996 the Minister of Agriculture, Fisheries and Food announced his decision to exclude all cattle over 30 months from the food chain. This went beyond the Spongiform Encephalopathy Advisory Committee's recommendation that meat from animals over 30 months be deboned under official supervision before entering the food chain and that the trimmings be classified as specified bovine material and be removed from the food chain. But the Government accepted the arguments of the industries within the entire food chain that a ban on the sale of meat from cattle over 30 months would be an extra protection to the public and help restore public confidence in beef. Confirmed cases of BSE are rare in cattle below the age of 30 months. The Government also accepted that such a measure would reduce the over supply of beef in the United Kingdom following the export ban, and convince Europe that the United Kingdom was determined to take rigorous measures to allay public fears about BSE.

Figure 3 The main elements of the beef industry prior to 20 March 1996



This figure shows the main elements of the beef industry, including the flow of products between them, prior to the crisis in 1996.

Source: National Audit Office analysis of Ministry and Intervention Board papers

1.8 A framework for lifting the export ban was agreed at the Florence European Council on 21 June 1996. This agreement specified five preconditions for the European Union to consider lifting the export ban. These were:

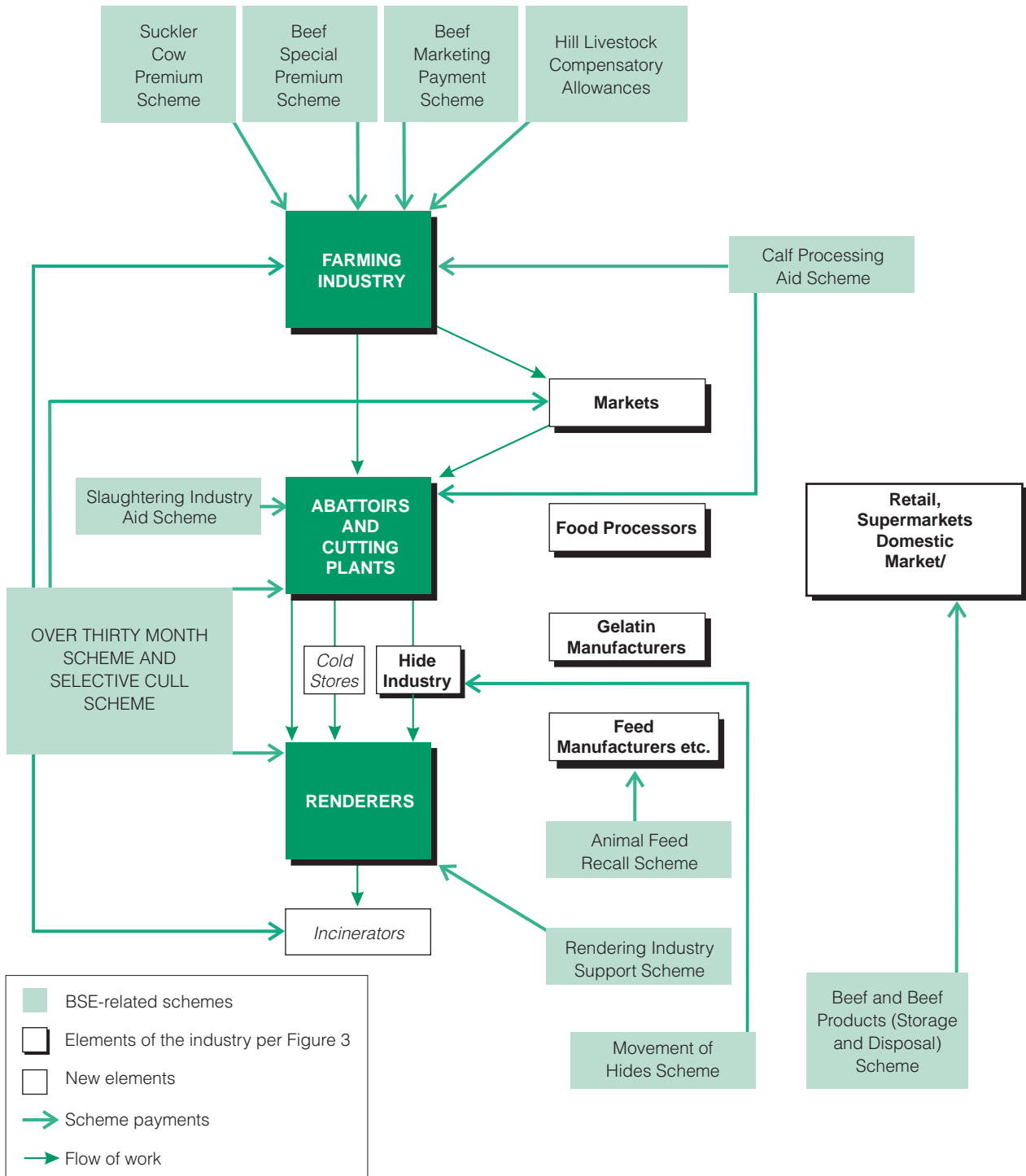
- the introduction of an effective animal identification and movement recording system with official registration;
- legislation providing for the removal of meat and bone meal from feed mills and farms and the subsequent cleansing of the premises and equipment concerned;
- effective implementation of the rule preventing cattle over 30 months of age from entering the food chain, and the destruction of these animals;
- improved methods for removing specified bovine material from carcasses; and
- the implementation of a selective slaughter programme to reduce more quickly the incidence of BSE.

A survey of progress towards meeting the preconditions was not part of the National Audit Office's study. However, the extent of the action on the animal movement system, the Over Thirty Month Scheme and selective slaughter programme is covered by this report.

1.9 Since 20 March 1996, the Ministry has announced and implemented, with the assistance of the Intervention Board, successive measures designed to restore public confidence and to aid the beef industry. As Figure 4 shows, support under these measures falls into three main categories:

- a)** payments for animals slaughtered:
- cattle over 30 months old (the Over Thirty Month Scheme);
 - very young calves (the Calf Processing Aid Scheme); and
 - cattle deemed to be at extra risk of developing BSE (the Selective Cull);
- b)** payment for work carried out under these schemes in other parts of the industry as a result of the need to acquire the animals, slaughter them, and process and dispose of the carcasses: markets, abattoirs, cold storage facilities, renderers, hide processors, incineration facilities; and

Figure 4 Aid and BSE-related work for the beef industry since March 1996



Note: More details of these schemes are given in Parts 2 and 3 of this report. Part 3 also covers the Beef Assurance and Export Certified Herd Schemes.

This figure indicates those elements of the beef industry which received aid or were involved in work under the schemes introduced or amended soon after 20 March 1996.

- c) direct aid to some sectors affected by the collapse in the beef market: producers, abattoirs, renderers, the hide industry; temporary extensions to existing schemes (the Suckler Cow, Beef Special and Hill Livestock Schemes); and schemes to collect and dispose of unsaleable meat or animal feed held by traders; most of this aid was transitional and has now ended.

Responsibility for Government action on BSE

1.10 In addition to the public confidence and industry support objectives of the individual schemes implemented after 20 March 1996, the previous and present Government's policy objectives as regards BSE both before and during the crisis were:

- to protect consumers of bovine products in the United Kingdom and elsewhere against any risk, however remote, that BSE may be transmissible to man;
- to eradicate BSE from the United Kingdom cattle population; and
- to prevent its transmission to other animal species.

1.11 The Minister of Agriculture, Fisheries and Food is responsible for agriculture in England, including animal welfare and food safety, and is the lead Minister for all UK agricultural matters in discussion with the European Union; the respective Secretaries of State have similar responsibilities for agriculture in Scotland, Wales and Northern Ireland. The Intervention Board Executive Agency is responsible for the administration of many of the BSE support schemes including the largest ones - the Over Thirty Month Scheme, the Selective Cull Scheme and the Calf Processing Aid Scheme. The Board's remit in respect of these schemes covers the whole of the United Kingdom with the exception of the Selective Cull Scheme, which is managed in Northern Ireland by the Department of Agriculture, Northern Ireland. The Secretary of State for Health has particular responsibility for public health issues in England and for research into Creutzfeldt-Jakob Disease. The Secretaries of State have responsibilities for public health issues in Scotland, Wales and Northern Ireland. Details of the main bodies involved in the BSE-related schemes are given in Figure 5.

Figure 5**Main public bodies involved with BSE-related schemes**

Public Body	Responsibilities	Schemes directly administered
Ministry of Agriculture, Fisheries and Food	Government policy in respect of all BSE-related actions in the agriculture sector and negotiations with the European Union or Commission. Implementation of some schemes.	Beef Marketing Payment Schemes, Rendering Industry Support (1996-97), top ups to Beef Special Premium and Suckler Cow Premium Schemes, increases to Hill Livestock Compensatory Allowances and aspects of the selective cull.
Agriculture Departments in Scotland, Wales and Northern Ireland	Responsible for agriculture in their areas and for the implementation of some schemes.	As for the Ministry in their respective areas, except for rendering support and the Selective Cull.
State Veterinary Service ¹ (accountable to the Ministry)	Responsible for the operation of rules on suspected BSE cases, including identification and incineration, and for the operation of rules on specified bovine materials and animal feed stuffs, including some for the Selective Cull.	
Meat Hygiene Service ¹ , an executive agency of the Ministry	Enforcement of hygiene, inspection and welfare requirements in fresh meat premises licensed by the Agriculture Departments in Great Britain. Agents of the Intervention Board for the Over Thirty Month Scheme and other schemes.	Implementation throughout the United Kingdom of the throughput element of the Slaughtering Industry (Emergency Aid) Scheme.
Meat and Livestock Commission ²	Agents of the Board for the Over Thirty Month Scheme and other BSE-related schemes and for established operations such as intervention.	
Intervention Board	Implementation of certain schemes, including arrangements for the storage and disposal of products from those schemes. The intervention purchasing scheme.	The Over Thirty Month Scheme, the Calf Processing Aid Scheme, Rendering Industry Support Scheme (1997-98), Beef Stocks Transfer Scheme, the Beef and Beef Products (Storage and Disposal Services) Scheme, Animal Feed Recall Scheme, Movement of Hides Scheme and the Selective Cull.

Notes: 1. Department of Agriculture, Northern Ireland performs these roles in Northern Ireland

2. Livestock and Meat Commission performs this role in Northern Ireland

Expenditure on BSE

1.12 Before March 1996, the costs of the United Kingdom's control and eradication measures in respect of Bovine Spongiform Encephalopathy had amounted to some £240 million. This sum was largely spent on compensation payments to farmers for animals slaughtered as suspected BSE cases, on the disposal of carcasses, on inspecting, sampling and testing animal feed and on research and development. No European Union financial support was received for

these activities. Cattle suspected of having BSE were slaughtered and destroyed. From August 1988 to February 1990 (November 1988 to May 1990 in Northern Ireland) farmers were paid compensation at 50 per cent of the market value for confirmed cases. Since February 1990 (May 1990 in Northern Ireland) all cases have received 100 per cent compensation.

1.13 In 1996-97, some £1.5 billion was spent in support of the beef industry, of which some £0.8 billion was eligible for reimbursement by the European Union subject to compliance with European regulations. Figure 6 indicates the main elements of expenditure on related schemes in 1996-97 and forecasts for the following three years. The largest scheme is the Over Thirty Month Scheme, which cost some £860 million in 1996-97. In addition to those shown, there are costs relating to storage and transport of material including the conversion of storage facilities and the trials of incineration plants. The likely costs of incineration are yet to be determined. There are also administrative costs including staffing which are not easily quantifiable but which may be in the region of £70 million a year.

**Expenditure on schemes
in response to the BSE
crisis**

Figure 6

	Expenditure	
	1996-97	1997-00 estimated
	£m	£m
New Schemes		
Slaughter Schemes		
Over Thirty Month	858	1,064
Calf Processing Aid	51	158
Selective Cull	0	155
Short Term Market Support		
Beef Marketing	58	0
Slaughter Industry (Emergency Aid)	81	5
Rendering Industry	87	70
Other		
Beef and Beef Products (Storage and Disposal Services)	1	2
Feed Recall	0	1
Hide Industry	4	3
Beef Assurance	1	1
Existing Schemes		
Additional expenditure		
Beef Special and Suckler Cow Premium Top Ups	120	8
Hill Livestock Compensatory Allowances	60	0
Purchases into Intervention	170	442
Total	1,491	1,909

Parliamentary concern

1.14 Parliament has shown great interest in BSE, which has been the subject of debates and parliamentary questions covering all aspects of the crisis. In July 1990, the Agriculture Select Committee published a report on BSE and issues relating to cattle traceability. The Ministry has reported to Parliament since December 1992 on a regular basis about the progress of research and about the eradication of BSE. Following the March 1996 crisis, the Agriculture and Health Select Committees jointly took evidence from Ministers, scientists and other interested parties and published this evidence on 22 May 1996. The Agriculture Select Committee announced in December 1997 that it would be holding an inquiry into current issues of concern to the beef industry. Some Members of Parliament have taken a particular interest in the selection of abattoirs to participate in the Over Thirty Month Scheme and have written to the Chairman of the Public Accounts Committee or to the National Audit Office on that and other elements of the scheme.

Scope and methodology of the National Audit Office examination

1.15 In view of the rapid growth in expenditure on BSE-related schemes, and given the continuing high level of concern over BSE and the new variant of CJD, both on the part of the general public and in Parliament, the National Audit Office decided to study the controls over this expenditure. The aim was to publish an informed and independent evaluation of the way in which the agriculture department schemes announced on or after 20 March 1996 were being implemented.

1.16 The National Audit Office concentrated specifically on:

- the Over Thirty Month Scheme; its nature and size; the procurement of services from abattoirs and renderers; support payments to farmers; and systems for processing and paying claims;
- the main features and methods for calculating aid payments under other schemes and market support measures; and
- aspects where problems were yet to be solved, were of longer term impact, were relevant to more than one scheme or were matters of administrative interest.

1.17 Our conclusions are included in this report as follows:

- Part 2 covers the Over Thirty Month Scheme, which is the largest of the schemes.
- Part 3 discusses other schemes and market support measures.
- Part 4 deals with administrative and other aspects.

1.18 The methods adopted by the National Audit Office in conducting this study included the examination of financial records, interviews of staff, review of files and of reports commissioned by the Ministry of Agriculture, Fisheries and Food and the Intervention Board, observation at abattoirs, renderers and stores and the testing of a sample of transactions under the Over Thirty Month and Calf Processing Aid Schemes. The National Audit Office consulted widely with many organisations with an interest in the beef industry.

1.19 The National Audit Office employed a panel of specialist advisors to review and comment on the proposed coverage of the study and the results. The purpose was to give the National Audit Office additional insights into issues underlying the topics examined, the nature and impact of the crisis and the schemes introduced in 1996 on the various sectors of industry affected by them. The panel consisted of:

- Mr David Neal-Smith, Barclays Bank. Deputy Head of Agricultural Services Department.
- Professor David Leaver, Wye College, University of London. Head of Department of Agriculture and Horticulture.
- Mr Mark Shelton, Deloitte and Touche. Senior Manager in Specialist Agriculture Sector Group.

In addition the National Audit Office engaged Professor John Bourne, formerly Director of the Institute for Animal Health, to review the contents of this report with particular reference to its summaries of the science and history of BSE in relation to the schemes we examined.

1.20 This report is concerned with the implementation of the schemes responding to the crisis precipitated by the announcements on 20 March 1996. It is not concerned with events before then. The Government announced in December 1997 an inquiry by Lord Justice Phillips, a report of which is now due by 30 June 1999. The terms of reference of the inquiry are:

To establish and review the history of the emergence and identification of BSE and new variant CJD in the United Kingdom and of the action taken in response to it up to 20 March 1996; and to reach conclusions on the adequacy of that response, taking account of the state of knowledge at the time, and to report on these matters to the Minister of Agriculture, Fisheries and Food, the Secretary of State for Health and the Secretaries of State for Scotland, for Wales and for Northern Ireland.

Part 2: The Over Thirty Month Scheme

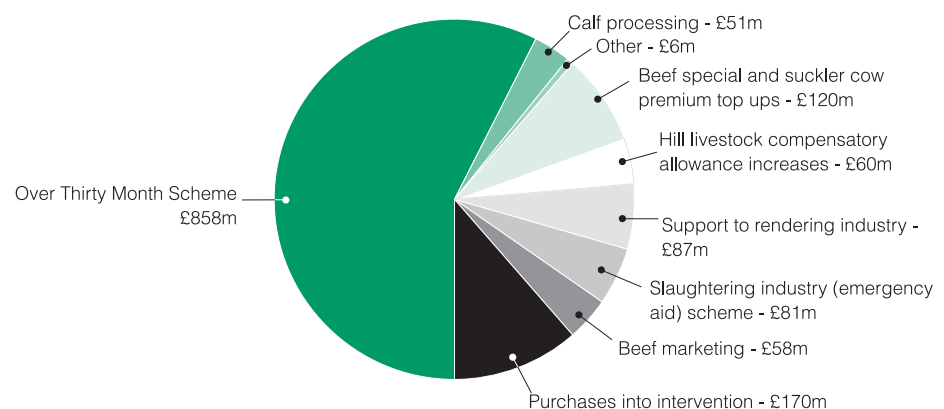
Introduction

2.1 The Over Thirty Month Scheme came into operation on 29 April 1996. It accounted for by far the largest single element of BSE-related expenditure in 1996-97 (Figure 7) and the slaughter of some 1.74 million animals by 30 September 1997. This part of the report sets out the results of the National Audit Office's investigation of the implementation of this scheme:

- its nature and size;
- the procurement of services from abattoirs and renderers;
- support payments to farmers; and
- the systems for processing and paying claims.

Expenditure on BSE schemes in 1996-97

Figure 7



The Over Thirty Month Scheme was the largest single element of expenditure in 1996-97

Nature and size of the scheme

2.2 The National Audit Office examined

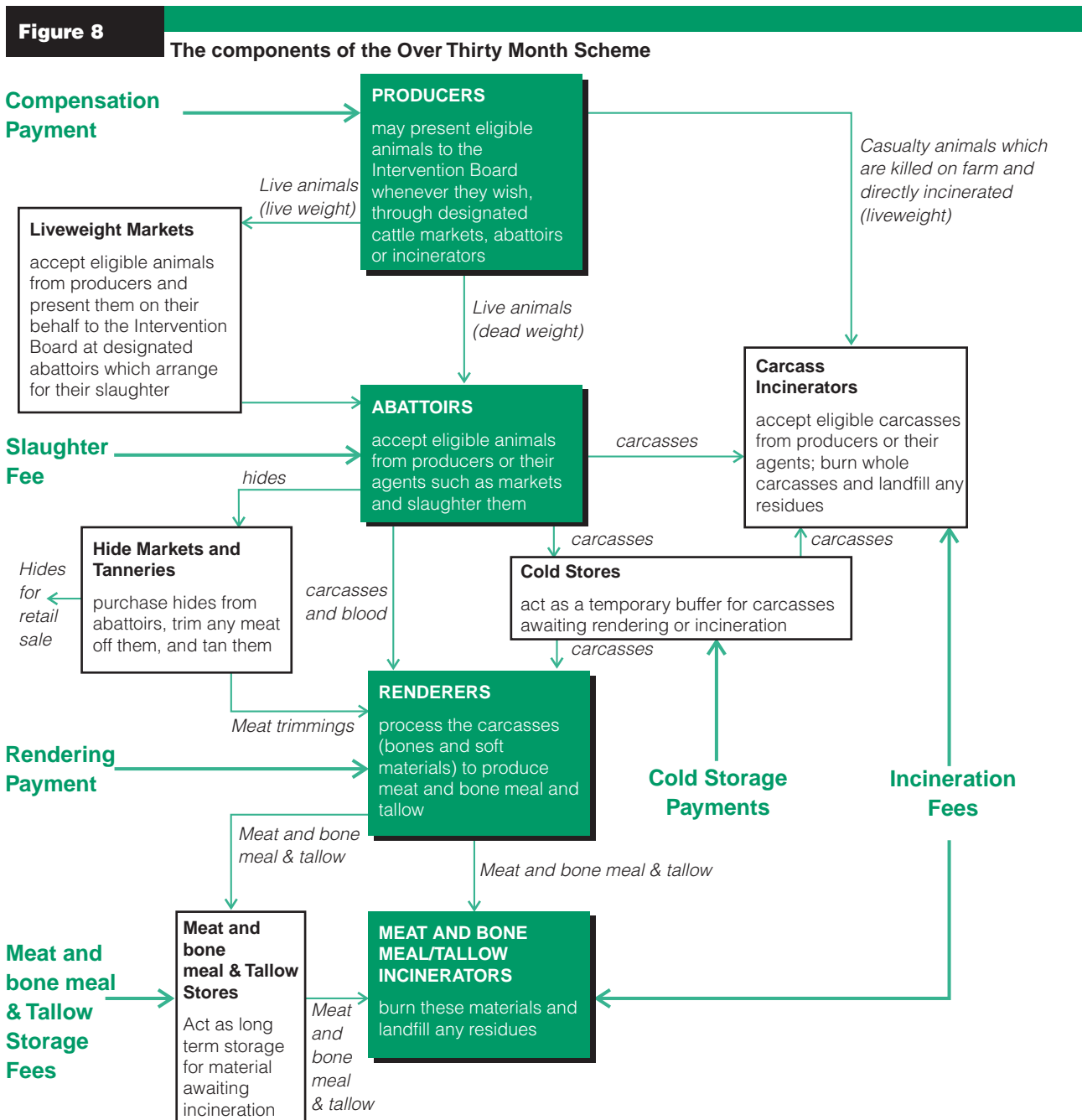
- why the scheme was introduced and its general structure;
- who was responsible for the design and administration of the scheme and what were the pressures that impacted on its design; and
- the total scale and cost of the scheme to date.

2.3 On 20 March 1996, the Spongiform Encephalopathy Advisory Committee advised the Government that carcasses from cattle aged over 30 months should be deboned in specially licensed plants supervised by the Meat Hygiene Service and the trimmings kept out of any food chain (paragraph 1.7, Figure 2). On 3 April 1996, as an emergency measure in view of the lack of sufficient suitably licensed de-boning capacity in the United Kingdom, the Ministry banned the sale for human consumption of all over 30 month bovine animals. It subsequently decided to maintain this ban on the basis that such meat would be unsaleable, and because of the need to restore public confidence.

2.4 The ban on the sale of over thirty month meat led to a complete collapse in the market for over thirty month animals. For example, farmers would normally have sold each year some 750,000 dairy and suckler cows which had reached the end of their economically productive lives, and the slaughtering, meat processing and rendering industries were heavily dependent on this trade. In addition, the restriction also affected a proportion of the three million beef animals sold for human consumption each year and slaughtered generally between the ages of 18 months and three years of age. Farmers had no time to adjust their production systems and market such animals before they became over 30 months and subject to the ban on sale for human consumption. In the light of these impacts on the market, the Ministry introduced the Over Thirty Month Scheme as part of its objective of maintaining a viable meat processing industry.

2.5 The Over Thirty Month Scheme, authorised by European Union Regulation 716/96, enables the Intervention Board to purchase and destroy eligible bovine animals which are over thirty months. However, farmers are not obliged to enter animals older than 30 months into the scheme. While farmers may not sell these animals for human consumption, they may choose to keep them for milking or breeding, for example. The scheme provides for support payments to farmers for

animals slaughtered, payments for the slaughter, rendering and incineration of the animals themselves, together with storage and haulage costs. Figure 8 illustrates the flow of animal material through the various stages together with those points where financial support is provided.



This figure shows the flow of material in the Over Thirty Month Scheme from producers via markets, abattoirs, cold stores and renderers to eventual disposal by incineration or landfill, or by sale in the case of hides. It also shows the nature of payments

2.6 During April 1996, Ministers required their staff to implement the scheme as quickly as possible in order to prevent the widespread collapse of the industry and to restore public confidence. There was also intense pressure on the Ministry and the Board from farmers, the meat processing industry and the public. Implementation involved extensive negotiations with the European Union to obtain statutory authority and financial support for the scheme; and with trade organisations and individual companies throughout the United Kingdom in order to negotiate the design and operation of the scheme. In addition, there was extensive administrative work in preparing scheme documentation and procedures, and in recruiting and training staff to operate them. The scheme came into operation on 29 April 1996 and the first animals were slaughtered on 3 May 1996.

2.7 European Union regulation 716/96, subsequently amended several times, forms the legal basis of the scheme and specifies various aspects of it including the level of compensation payments to farmers, the degree of European Union financial support, and the requirement for animals to be destroyed. The Ministry has lead United Kingdom responsibility for policy aspects of the scheme, with other territorial departments fully involved in policy decisions and the co-ordination of legislation. Ministers delegated the implementation of the scheme to the Intervention Board, which is responsible throughout the United Kingdom for all aspects of its operation. The Board has employed various agents in Great Britain (the Meat Hygiene Service and the Meat and Livestock Commission) and Northern Ireland (the Department of Agriculture, Northern Ireland Veterinary Service and the Livestock and Meat Commission) to implement the complex checks and regulations required in markets, abattoirs, renderers and other plants.

2.8 In designing and implementing the scheme, the Board was faced with significant constraints on how to dispose of carcasses from the scheme:

- it was impossible to incinerate all slaughtered carcasses at an acceptable rate, as there was insufficient carcass incineration capacity in the United Kingdom;
- cold storage capacity for carcasses was limited; and
- although rendered products could be stored more cheaply than carcasses, rendering capacity was extremely limited.

2.9 These constraints limited the number of animals which could be accepted into the scheme. Farmers were expected to present each week around 15,000 animals, but even before the scheme had started there was a large backlog of animals awaiting slaughter. Estimates of the backlog varied from between 100,000 and 300,000 animals, and it contributed significantly to the difficulties the Intervention Board faced. Although there was significant over-capacity in the slaughtering industry, rendering capacity was sufficient for processing only some 25,000 animals a week - insufficient to reduce this backlog quickly. As a result, the Board was obliged to become heavily involved in the operational management of the scheme in order to maximise the efficient utilisation of available rendering capacity.

2.10 As at 31 March 1997, some 1.35 million animals had been slaughtered and processed under the scheme. Of these carcasses:

- over 1 million were rendered, resulting in the production of some 186,000 tonnes of meat and bone meal and 100,000 tonnes of tallow now in store;
- 169,000 were held in cold storage; and
- 60,000 were incinerated.

2.11 In the period from 1 April 1997 to 30 September 1997, a further 390,000 animals were slaughtered, bringing the total number since the start of the scheme to 1.74 million. Reductions in throughput have eliminated the need for any further cold storage and have allowed the Board to arrange processing of the accumulated frozen material.

2.12 Scheme costs are shown in Figure 9:

**Total Costs of the Over
Thirty Month Scheme**

Figure 9

	1996-97 £m	1997-98 to Sept 1997 £m	Total costs to Sept 1997 £m
Compensation payments to farmers	669.8	152.4	822.2
Slaughter payments to abattoirs	71.1	13.9	85.0
Storage and transport costs	54.6	25.8	80.4
Payments for rendering	55.2	24.7	79.9
Incineration costs	6.8	15.0	21.8
Total Payments	857.5	231.8	1,089.3

Procurement of slaughtering and rendering services

2.13 As indicated above, the role and capacity of the slaughter and rendering industries are fundamental to the operation of the Over Thirty Month Scheme. In setting up the scheme, the Intervention Board's primary objectives were to obtain as much rendering capacity as possible with the co-operation of the rendering industry; and to maximise the use of this capacity in its selection of abattoirs to participate in the scheme. Negotiations with these two sectors took place in the midst of a crisis for these industries which had fundamentally changed the market relationship between them and which had made the future business outlook uncertain. Rendered products from the Over Thirty Month Scheme had become a waste disposal problem rather than a profitable source of income. However, the co-operation of both renderers and abattoirs was essential for the operation of the scheme.

2.14 The National Audit Office examined the criteria applied, the extent of consultation with the industry and whether competitive tendering was used in:

- the selection and allocation of work to abattoirs;
- the determination of slaughter fees; and
- the allocation of work to renderers and the determination of rendering fees.

Selection of abattoirs

2.15 At the outset of the scheme, the Intervention Board did not tender competitively for the provision of abattoir services. Instead, during April 1996, at the same time as the scheme was being formulated, the Board invited expressions of interest from abattoirs. The selection of those best placed to participate in the scheme took account of advice from abattoir trade associations and sought to identify those capable of dealing with the level of throughput and the quality of work required. The Board applied the following criteria:

- a history at the abattoir of large scale trade in cows and heavy steers;
- logistical considerations such as geographical spread, proximity to renderers, and ease of access for the collection of material;
- abattoir currently in operation and European Commission approved;

- commitment by the abattoir for a minimum handling capacity of 100 cows a day; and
- whether the abattoir was committed to accepting casualty animals eligible under the scheme.

2.16 In England and Wales, there was considerable disparity between the nature of the relatively few big export-oriented abattoirs and the many smaller ones. The industry was characterised by significant overcapacity, which heightened the desire of plants to participate in the Over Thirty Month Scheme. The Board took the lead role in selecting abattoirs and managing the slaughter programme, since there was neither enough time to allow the industry to organise itself nor certainty that this approach would be effective in meeting the urgent demands.

2.17 There were 21 abattoirs in England and Wales on the initial list which the Intervention Board drew up and which was used from 3 May to 26 May 1996. The list included most of the large export-oriented abattoirs which had been most seriously affected by the export ban. From 26 May 1996, the Intervention Board extended the list to 42 abattoirs in England and Wales in response to the concern of farmers and markets that the original list did not provide sufficient geographic coverage. However, as renderers could not cope with a greater throughput, slaughter allocations for abattoirs on the initial list had to be reduced. While there was a small number of subsequent additions and deletions, this list remained the basis on which the scheme was operated until 13 July 1997 when a smaller list based on the results of a competitive tendering exercise was introduced (paragraph 2.26).

2.18 The situation was slightly different in Scotland and Northern Ireland, where there were proportionately fewer abattoirs and renderers and where the relationships between the different industry sectors were stronger. As a result, it was possible for the meat industry to agree collectively on certain operational aspects of the scheme, particularly the slaughtering arrangements which would both safeguard the welfare of animals and maximise the utilisation of the limited rendering capacity. In Scotland, the Scottish Office advised the Intervention Board on all aspects of the operation of the scheme including the selection of abattoirs. The initially approved list included 13 Scottish abattoirs. In June 1996 a sub-group of the Scottish Meat Industry Liaison Group was set up to advise the Scottish Office and the Board on allocations of cattle to collection centres and abattoirs. Similarly, in Northern Ireland the Northern Ireland Meat Exporters' Association was

responsible for the allocation of cattle for slaughter under the scheme and an Industry Liaison Committee, under the chairmanship of the Association, was established to oversee arrangements and ensure fairness. Only one of the nine abattoirs in the province did not take part in the scheme.

2.19 Most abattoirs which participated in the scheme in England and Wales and all eight in Northern Ireland also slaughtered under thirty month animals for human consumption, though the rules of the scheme required this to be carried out on different days of the week, with prescribed cleaning undertaken in between. This contrasted with the situation in Scotland. Some of the 13 abattoirs on the initially approved list dropped out due to objections from supermarkets. From June 1996, plants where carcasses were chilled before being sent to cold storage were required to be “dedicated” and not to slaughter any meat for human consumption. From 27 September 1996, only seven “dedicated” Scottish abattoirs participated in the Over Thirty Month Scheme. The Scottish Office introduced this approach to increase consumer confidence in the elimination of risks of meat from abattoirs participating in the scheme entering the human food chain. It also considered this would make the control and policing of the scheme easier for enforcement officers.

Allocation of work to abattoirs

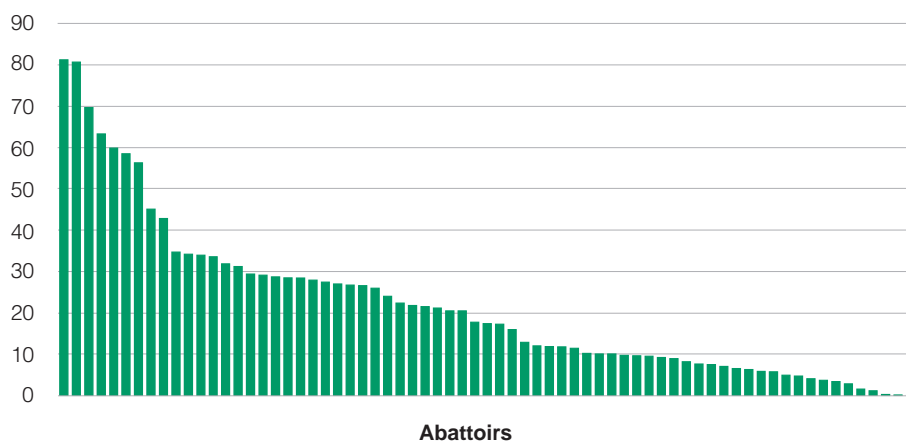
2.20 In England and Wales, for the reasons set out above, the Board became heavily involved not only in the selection of abattoirs but also in the operational management of the slaughter programme. This involved identifying the available rendering capacity each week and allocating this to participating abattoirs. Abattoirs were allowed to accept only this number of animals into the scheme from farmers. Such quotas were required because the numbers of animals awaiting slaughter were far greater than the available rendering capacity. In Scotland and Northern Ireland, slaughter allocations, taking account of available rendering capacity, were largely managed by the industry itself.

2.21 Analysis of abattoir throughput figures by the National Audit Office showed that some nine abattoirs accounted for over 500,000 animals slaughtered over the period from 3 May 1996 to 13 June 1997 (Figure 10). The Intervention Board allocated work to designated abattoirs on the basis of their pre-crisis throughput levels. This reflected the concern of Ministers that the allocation of scheme work by the Government should not be seen as a means of rationalising the industry.

Throughput by Abattoir

Figure 10

Animals slaughtered (000's)



There were over 60 abattoirs participating in the scheme from May 1996 to June 1997. During that period there was a wide variation in the number of animals slaughtered at each abattoir.

Conclusion

The National Audit Office concluded that:

- despite over-capacity in the abattoir industry, the Intervention Board did not use competitive tendering at the outset of the Over Thirty Month Scheme. The Board thought that such an approach to the selection of abattoirs would have led to unacceptable delays, when there was intense pressure to implement the scheme quickly;
- instead, the Board sought expressions of interest from abattoirs and advice from trade associations to identify those capable of dealing with the level of throughput and quality of work required. In England and Wales, the Board took the lead in managing the work programme. This approach enabled it to maximise the use of rendering capacity, the major determining factor in allowing the scheme to proceed smoothly;
- the Board applied criteria in the selection of abattoirs that accorded with its approach of seeking to minimise delay and maximise throughput to acceptable standards and there was no evidence that the Board had acted other than impartially in applying these criteria; and
- the Board took account of the views of the industry and of its patterns of work before the crisis and allowed the industry to manage the operation of the scheme where the industry structure made this an effective option.

Determination of slaughter fees

2.22 At the outset of the scheme, as competitive tendering was not used, the Intervention Board negotiated with abattoir trade organisations a temporary slaughter fee of £87.50. An initial asking price of £129 had been sought by abattoir representatives. The Board required that the fee be subject to adjustment based on the results of an “open books” examination of the costs of slaughtering. This was conducted by Coopers and Lybrand and submitted to the Intervention Board in July 1996. The examination covered the fixed and variable costs incurred by abattoirs in undertaking Over Thirty Month Scheme work.

2.23 This examination found that the costs of slaughtering in 12 abattoirs ranged from £39 to £51 per animal and concluded that reducing the slaughter fee to the mid-point of this range (£45) would save up to £45 million in a full year and £200 million over the potential period of the scheme. These figures did not take account of the value of the hides which Coopers recommended abattoirs should be free to sell and for which there was then an emerging market. In the light of these findings, the Intervention Board reduced the slaughter fee to £41 from 26 August 1996. At the same time they agreed a number of supplements to compensate abattoirs for expenses not reflected in the main fee, relating to weekend working, heavy animals and the preparation of carcasses for cold storage. This fee structure remained in force until 13 July 1997 when rates fixed by competitive tendering were introduced.

2.24 The Board considered backdating the £41 fee to 16 June 1996 and thereby reclaiming the over-reimbursement of the abattoirs’ costs, a course which the Treasury favoured. With the agreement of the Agriculture and Treasury Ministers, the Board decided not to do so in order to maintain the goodwill of the participating abattoirs, to avoid the risk of disrupting the throughput of the scheme at a time when there remained a large backlog of animals awaiting slaughter. Having set the slaughter fee at the lower end of the range suggested by Coopers and Lybrand, this resulted in some recovery of the excess cost reimbursement provided by the initial temporary fee.

Conclusion

The National Audit Office concluded that:

- because the Board had to get the Over Thirty Month Scheme under way immediately, it set the slaughter fee after negotiation with the industry instead of by competition. In view of the over-capacity in the industry, it would have been reasonable to expect that keen prices would have been on offer in negotiations for this work;
 - pending competitive tendering, it was right for the Board to have estimated the costs to the abattoirs of carrying out this work and to have reduced the initial fee in the light of the results;
 - the initial fee of £87.50 per animal was set on a provisional basis pending an open books examination of the industry's costs; the fee was revised to £41 in August 1996. Had this fee been backdated to the start of the Over Thirty Month Scheme, there might have been a saving of some £15 million; however, this could have adversely affected elimination of the backlog of animals awaiting slaughter; and
 - the intense pressure from Ministers, farmers and the public to eliminate the backlog of animals meant that the Board's negotiating position was weak throughout 1996, as it required the willing co-operation of the abattoir industry to operate the scheme.
-

Determination of fees: competitive tendering exercise

2.25 The Coopers and Lybrand review of slaughtering costs recommended that any reduction in the slaughter fee should be a further interim measure pending the introduction of full competitive tendering. On 10 December 1996, the Board issued a notice inviting expressions of interest in tendering. On 25 February 1997, the Board issued an invitation to tender with the aim of identifying those who could provide slaughter, rendering, incineration and disposal services. The tender invitation made it clear that preference would be given to those who could slaughter and dispose of the animals by direct incineration, as an integrated operation under one responsibility. The closing date for tenders was 8 April 1997. The periods allowed for expressions of interest and tender submissions reflected the European rules applying generally to the procurement of services.

2.26 As no significant tenders covering combined slaughter and disposal operations were received, the Board decided to consider slaughter tenders separately. A project board, consisting of representatives from the Agriculture Departments, the Meat Hygiene Service, the Meat and Livestock Commission, and the Intervention Board evaluated a short-list of bidding abattoirs, all of which participated in bid clarification meetings. As a result the Intervention Board listed 26 approved abattoirs with whom contracts were placed in Great Britain as from 14 July 1997. In Northern Ireland, the new arrangements did not come into effect until 28 July when an injunction prohibiting the award of contracts was lifted

following withdrawal of a legal action by an unsuccessful tenderer. The reduction in the number of abattoirs from 60 to 26 reflected the much reduced throughputs required of the Scheme from some 60,000 animals per week at the peak to an expected average of only 15,000.

2.27 The slaughter fees with individual abattoirs ranged from £13.33 to £33 per animal, taking into account the different terms of each contract. Subject to requirements for control of waste products, abattoirs were free to sell hides. The average fee across Great Britain as a result of the competitive tendering exercise was approximately £25 - substantially lower than the previous slaughter fee of £41 and markedly less than the initial fee of £87.50. The new contracting arrangements will save approximately £12 million in a full year against the former slaughter fee of £41.

2.28 In selecting abattoirs, the Intervention Board endeavoured to strike a reasonable balance between its objectives of obtaining value for money, ensuring adequate producer access and addressing animal welfare issues. All abattoirs were required to accept casualty animals and some offered a specialist casualty service. Where the Board accepted relatively high bids, this was generally because of the importance of providing slaughtering services in remoter areas such as Cumbria.

2.29 The Board gave priority to clearance of the backlog of animals awaiting entry into the scheme rather than to competitive tendering. The Board took the view that, if tendering had been undertaken earlier, this would have been at the expense of dealing with the backlog before the end of 1996. This would have led to welfare problems for cattle and severe financial loss for farmers where large numbers of cattle had to be wintered outdoors pending entry to the scheme and in the absence of a market for them. The Board suggested to the National Audit Office that this could have led to pressure to make further compensation payments to farmers which if acted on would have offset potential savings from competitive tendering.

Conclusion

The National Audit Office concluded that:

- in view of the high cost of the Over Thirty Month Scheme, and the extent of over-capacity in the industry, it was to be expected that the taxpayer would secure considerable financial benefits by the setting of slaughter fees in competition;
 - because the Board had to give priority to eliminating the backlog of animals awaiting slaughter, it could not initiate competitive tendering until December 1996, eight months after the start of the scheme. Total slaughter fees paid in 1996-97 were £71 million; and
 - the results of tendering came into effect in July 1997. The average fee of £25 obtained by the Intervention Board was well below the previously negotiated fees of £41 and £87.50 and represented savings of £12 million a year against the fee of £41.
-

Allocation of work to renderers

2.30 In securing the participation of the rendering industry, where there was limited capacity, the Board was faced with an opposite situation to the slaughtering industry, where there was overcapacity. Initial discussions with rendering firms in the United Kingdom indicated that rendering capacity was sufficient to process 25,000 animals a week - only 10,000 more than the estimated weekly increase in animals awaiting slaughter and not enough to reduce quickly the backlog of between 100,000 and 300,000 animals. In this situation, the main objective of the Board was to make optimum use of the limited rendering capacity available in order to maximise throughput rather than to select which rendering facilities to use. Competitive tendering would not have assisted in achieving this objective. The allocation of work to the eleven rendering companies involved in the scheme was managed in England and Wales by the Board identifying available capacity each week and allocating this to participating abattoirs.

Determination of rendering fees

2.31 At the outset of the Over Thirty Month scheme in April 1996, the Intervention Board negotiated with renderers an initial fee of £105 per tonne (£110 in Northern Ireland), subject to a similar determination of costs as in the case of abattoirs. The review, carried out by Coopers and Lybrand and submitted in September 1996, found that historic rendering costs (excluding raw material costs) ranged from £22.46 to £79.03 per tonne, with an average of £51.59 per tonne. In the light of these historic cost data, Coopers and Lybrand concluded that there was scope for a reduction in the fee. Coopers and Lybrand were not asked to take account of the cost of collecting carcass material from the abattoir; nor to estimate the additional costs of the extensive control and documentation requirements at the rendering plant including the need to divert non-scheme material to other plants; enhancement of effluent disposal facilities to cope with increased throughput; and the accelerated wear and tear on the plant as a result of the round the clock working required to overcome the backlog. The Coopers and Lybrand review covered only direct costs and therefore did not include any judgement of what might be a reasonable profit margin in the circumstances.

2.32 However, with the results of the review, the Intervention Board negotiated a new agreement with the renderers in October 1996. The Board's objective was to maximise throughput of Over Thirty Month material by providing the renderers with an incentive to:

- identify alternative disposal routes for surplus material from under thirty month animals;
- provide additional capacity; and
- adopt a collaborative approach in identifying ways of maximising scheme throughput, for example by changing the mix of the materials being rendered to increase efficiency.

Payment was to be based on the throughput achieved (Figure 11). All rendering plants increased throughput sufficiently to qualify for the highest payment rate - which remained at £105 per tonne. However, the agreement provided for renderers themselves to pay for the storage and disposal of material from under 30 months old animals which had been rendered with Over Thirty Month Scheme material during 1996.

Incentivised rendering payments (October 1996)

Figure 11

Tonnes rendered per week in the UK	Payment rate (£ per tonne)
greater than 15,250	105
from 13,500 to 15,249	95
from 12,500 to 13,499	85
less than 12,500	75

Payment rates to renderers were dependent on quantity of material processed each week

2.33 In January 1997, a new contract was negotiated with renderers in order to provide for the disposal of frozen carcasses held in cold store. The incentivised element of the previous contract was dropped and the payment rate remained at £105 per tonne regardless of throughput. Up to September 1997, some £80 million had been paid to 9 rendering companies since the start of the scheme.

2.34 Following the elimination of the backlog of cattle awaiting slaughter, also in January 1997 the Board sought to obtain integrated tenders from firms who could provide slaughter, rendering and disposal services. No bids for rendering were obtained under this exercise. Therefore, in April 1997, the Board sought tenders from individual renderers. By that time there was a greatly reduced requirement for capacity, creating the scope for more competitive tendering on a buyers market. As a result, contracts were let in January 1998 to five rendering plants at an average price of £82 to £83 per tonne. This will lead to savings of about £5 million a year on the amounts paid to those plants.

Conclusion

The National Audit Office concluded that:

- the undercapacity in the rendering industry, and the Board's dependence on it for the effective operation of the Over Thirty Month Scheme, were such that the Board was in a weak position in the negotiation of fees;
- the Board was therefore right to bring in financial incentives in October 1996 for the provision of further rendering capacity and a greater diversity of operating methods, using information available from the consultants' review of the industry's costs;
- the results in April 1997 from invitations for integrated tenders including rendering services indicated that the Board had to continue to obtain such services direct from renderers; and
- it was not until January 1998, that the Board was able to benefit from the results of competitive tenders from individual renderers: this led to contracts with five of the ten plants previously participating in the Scheme at an average cost per tonne of between £82 and £83, leading to savings of some £5 million a year on amounts paid to those plants.

Support payments to farmers

2.35 The ban on the sale of all over thirty month bovine animals had an immediate impact on the farming element of the beef industry. The numbers of animals eligible for entry into the scheme, the need for appropriate compensation to be determined and paid quickly to farmers, and the effect of a backlog in the acceptance of animals into the scheme, led the National Audit Office to examine:

- how the rates of compensation payable were determined and whether these took account of market practices and the nature of animals eligible for entry into the scheme; and
- how entry of animals into the scheme was organised and whether action was taken to address the impact of a backlog.

Compensation payable to farmers

2.36 The basic compensation payments to farmers are determined by the European Union Beef Management Committee and are part funded by the European Union. Compensation is paid on the basis of the weight and, since August 1996, the category of the animal. From the start of the scheme, the European Union had set a maximum weight limit for Community contributions. Initially, the United Kingdom funded all payments above that limit, with the approval of the Union. Farmers present cattle to the scheme largely via auction markets or directly to abattoirs.

2.37 Abattoirs do not generally have the facilities for weighing live animals. Therefore the compensation payable is determined in one of two ways:

- on a liveweight basis, for animals presented via auction markets; or
- on a deadweight basis for animals presented via abattoirs, where they are weighed after slaughter, dressing and the removal of specified bovine material. As carcasses are significantly lighter than live animals, a “killing out ratio” or “deadweight coefficient” is applied to calculate the liveweight equivalent and the payment due.

2.38 The rate set by the European Union at the start of the Over Thirty Month Scheme was one ECU per kilogram for animals presented liveweight. The killing out ratio was set at 2:1. This meant that farmers would receive two ECUs per kilogram for animals presented deadweight via abattoirs. When the scheme was introduced the Ministry thought that few beef cattle would be involved. This proved not to be the case. Operation of the scheme quickly showed that while the killing out ratio was reasonably accurate for cull cows it was too generous for beef animals, such as steers and heifers. As a result, farmers received higher compensation than if they had presented such animals directly to abattoirs rather than via markets. This distortion was brought to the attention of the Commission and was corrected when the European Union Beef Management Committee reduced the “killing out” ratio for bulls, steers and heifers to 1.7:1 from 5 August 1996. As a result of the timelag until the Commission decided to modify the deadweight coefficient, the cost of the higher rate payable prior to August 1996 amounted to some £15 million.

2.39 In August 1997, the European regulation was amended to restrict all payments to the equivalent of a maximum 560 kilograms liveweight. Farmers received no extra compensation for heavier animals. The limits may have reduced the incentives for them to enter bulls, steers or heifers into the scheme or to fatten their ex-dairy cows in order to gain extra compensation. The limits were:

- liveweight all animals 560 kilograms
- deadweight cows 280 kilograms
- deadweight bulls, steers, heifers 329 kilograms.

2.40 Other changes made in the basic rates payable to farmers were due to:

- a reduction in the basic rate with effect from 21 October 1996; and a further reduction in the basic rate for cows with effect from 4 August 1997; both changes reflected falling market prices; and
- successive revaluations of the agricultural exchange rate used for converting payments set by the European Union in ECUs into sterling; this has led to reductions in the value of compensation payments to farmers.

These changes in the payments to farmers are summarised in Figure 12.

**Changes in Over Thirty
Month payment rates to
farmers**

Figure 12

Date	Reason for change	Compensation rate (cows, liveweight)	
		ECU/kg	£/kg
29 April 1996	basic compensation rate set at outset of scheme	1.0	0.86
1 July 1996	reevaluation of exchange rate used in converting ECU into sterling	1.0	0.83
5 August 1996	reduction in deadweight coefficient to 1.7:1 for bulls, steers and heifers	1.0	0.83
21 October 1996	reduction in basic compensation rate	0.9	0.75
1 November 1996	reevaluation of exchange rate	0.9	0.73
1 February 1997	reevaluation of exchange rate	0.9	0.69
1 April 1997	reevaluation of exchange rate	0.9	0.67
1 July 1997	reevaluation of exchange rate	0.9	0.65
4 August 1997	reduction in basic compensation rate (cows only), and introduction of a maximum payment limit	0.8	0.58
1 September 1997	reevaluation of exchange rate	0.8	0.56

Notes: 1. The reduction in the basic compensation rate on 4 August 1997 applied to cows only. The basic rate for bulls, steers and heifers remained at 0.9 ECUs per kg (then worth £0.65 per kg).

2. The maximum deadweight on which compensation is payable from 4 August 1997 is 280 kilograms for cows and 329 kilograms for bulls, steers and heifers.

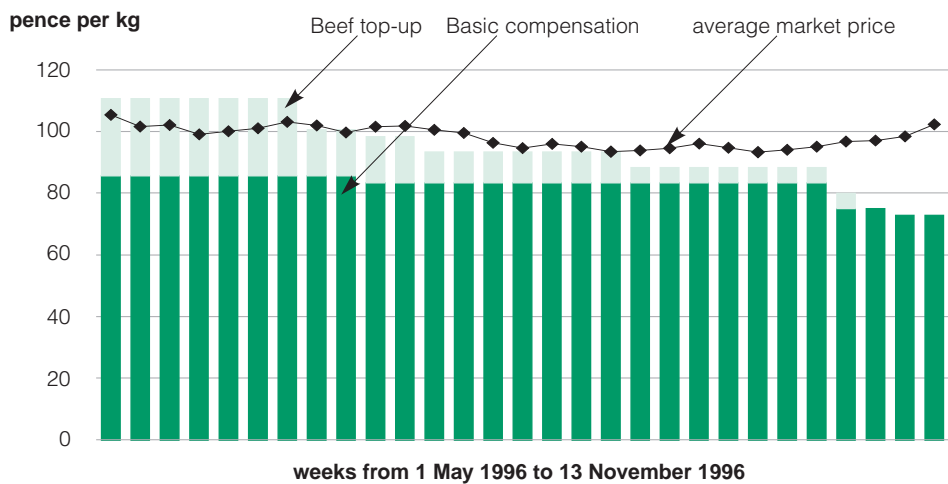
Rates of compensation to farmers have reduced since the scheme was introduced.

2.41 In addition to the basic compensation payable, as determined by the European Union, the United Kingdom Government made top-up payments to farmers on beef cattle for the first six months of the scheme. This was because some producers of steers and heifers normally planned to bring their animals to market at over 30 months and did not have time to adjust their businesses in the light of the crisis. As such animals produced solely for meat would typically fetch significantly more than dairy and breeding cows at the end of their economically useful lives, ministers agreed to pay a supplement to the basic premium at a rate that reflected the historic differences between cow prices and those for steers and heifers. The supplement would be payable for six months in order to allow producers time to adapt their marketing programmes to the new circumstances.

2.42 The top-up payment was set at 25 pence per kilogram liveweight at the start of the scheme. The Ministry was responsible for monitoring payment levels against market prices. In the light of these, they successively reduced the top-up payment in June, July and September 1996 before it was phased out on 2 November 1996. Figure 13 shows the reductions in scheme compensation and top-up rates against the market prices for under thirty month animals sold for human consumption.

Over Thirty Month Scheme compensation rates for beef cattle

Figure 13



Note: The market price is the average price of under thirty month beef animals which were sold for human consumption.

Source: National Audit Office analysis of Ministry of Agriculture data

The top-up element of compensation payable to farmers for beef cattle was phased out between May and November 1996.

2.43 When the top-up was first reduced on 17 June 1996, ministers gave a commitment to maintain the original top-up rate of 25 pence per kilogram for animals which were over thirty months on that date no matter when they were entered into the scheme. This led to increased complexity in administering scheme payments as different rates needed to be applied dependent on the age of the animal. In addition, extra documentary checks were required for the payment of the higher rate.

Conclusion

The National Audit Office concluded that:

- the deadweight ratio for bulls, steers and heifers determined by the European Union at the outset of the scheme was inaccurate, thus providing a financial incentive for farmers to submit their animals directly to abattoirs. The additional cost to the European Union incurred in the first three months of the scheme, until the Commission decided to reduce the ratio, was some £15 million;
- the value of compensation payments to farmers has, in line with trends in market prices, fallen substantially with the result that the basic rate for cows as at September 1997 was only 65 per cent of the value set at the outset of the scheme;
- the introduction of maximum compensation weights has reduced the incentives for farmers to enter bulls or steers into the scheme, as these were generally heavier than ex-dairy cows, or to fatten ex-dairy cows in order to gain extra compensation; and
- the implementation of top-up payments took account of market prices and was phased out in line with the objectives set at the start of the scheme, although some additional administrative complexity arose from the decision to maintain top-up payments for older animals.

Entry of animals into the scheme and the impact of the backlog

2.44 Farmers or their agents can enter animals into the scheme for slaughter through:

- an auction market approved and registered by the Intervention Board;
- a designated abattoir; or
- a designated incineration plant for casualty animals, for example those which are fit for human consumption but have to be slaughtered on-farm because they are unfit for travel due to accidents or illness other than notifiable diseases.

2.45 The scheme regulations originally envisaged that the farmers would present over thirty month animals to the Intervention Board at specially designated abattoirs where the animals would be weighed live and compensation determined. This proposal had the merits of administrative simplicity. However, even before the scheme had begun to operate it was necessary to make arrangements for animals to be accepted through cattle markets, because few abattoirs had facilities for weighing cattle live. In addition, the Regulation was altered to allow farmers to present animals directly to abattoirs for slaughter, giving a choice of entry points into the scheme and to provide an option for producers in England and Wales who had traditionally marketed their cattle on a deadweight basis.

2.46 Even before the scheme had come into operation and the first animals were slaughtered on 3 May 1996, the crisis had led to a large backlog of unsaleable cattle. The rate at which collection centres could accept animals into the scheme was limited by the available rendering capacity. As a result many farmers were unable to enter animals into the scheme as quickly as they wished. In consequence there was immense pressure on the Intervention Board to eradicate the backlog before the start of winter in 1996.

2.47 Initial estimates of the backlog as at May 1996 varied considerably. The Ministry considered that it might amount to approximately 130,000 animals, while abattoirs and markets thought it might be significantly larger. The Ministry did not attempt to estimate the true size of the backlog until September 1996, when it carried out a telephone survey of producers, which suggested that the backlog was rather larger than it had expected.

2.48 In view of this uncertainty the Intervention Board introduced a temporary registration scheme in England and Wales on 21 October 1996. This required farmers to register animals which were available for immediate slaughter; only registered animals would be subsequently accepted. The primary purpose of the registration scheme was to identify the size of the backlog more reliably. Application forms were distributed to 132,558 farmers in England and Wales. By 8 November, 38,479 applications covering 328,138 animals had been returned and registration certificates were sent out for these animals. An analysis of the register by county largely confirmed the Intervention Board's understanding of where the biggest backlogs lay. It also showed that dairy and breeding cows and bulls made up 82 per cent of the total with steers and heifers constituting the remaining 18 per cent. The temporary registration scheme also applied in Northern Ireland. Here the pattern was rather different, with beef cattle making up almost 30 per cent of the total. No registration scheme was found to be necessary in Scotland, where the Scottish Office and industry bodies continued to advise the Board.

2.49 The Intervention Board adopted a variety of measures to speed up processing and eliminate the backlog during autumn 1996 before the onset of winter weather and the increased risk of cattle welfare problems. These included:

- obtaining increased rendering capacity, in particular through:
 - a) changing the mix of the material being rendered to maximise the available rendering capacity through the greater use of cold storage;
 - b) persuading the largest rendering company in the United Kingdom to make available, for two months only, one of its largest plants, which was capable of processing up to 3,000 tonnes of material a week, and thus enable it to benefit from the highest rates of payment described in paragraph 2.32;
 - c) concluding an agreement with renderers which gave them financial incentives to maximise throughput of over thirty month animals, for example, by diverting into landfill material from other animals which would otherwise have been rendered;
- obtaining more cold storage by converting government grain stores into cold stores and by making strenuous efforts to obtain other commercial cold storage capacity; and
- obtaining some increase in carcass incineration capacity.

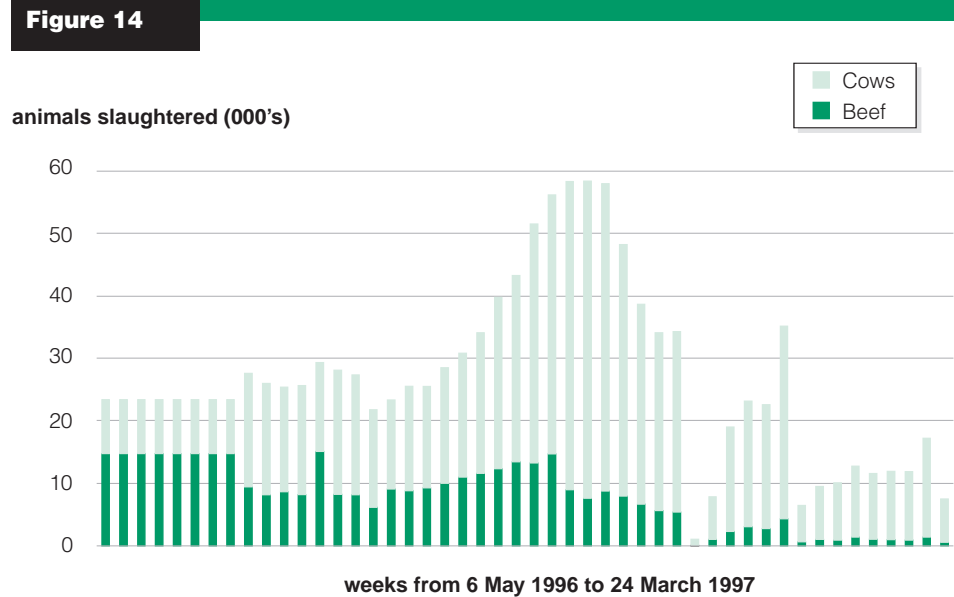
2.50 The Government's decision in December 1996 to proceed with a selective cull may have induced farmers not to enter cattle into the scheme, as there would be little incentive to enter animals for the Over Thirty Month Scheme if they might receive the much higher compensation available under the Selective Cull Scheme described in Part 3 of this report.

2.51 The result of these measures was to increase the processing capability from 25,000 animals a week to some 60,000 in November 1996. Figure 14 shows this increase. It also shows how the percentage of beef cattle processed, such as steers and heifers, fell as beef producers adjusted their production and marketing systems. These efforts greatly reduced the backlog so that by January 1997 producers faced no delays in gaining access to the scheme. It should be noted that, while almost 330,000 registration certificates were issued to farmers (paragraph 2.48), only a third had been used for entering animals into the scheme by

November 1996. This suggests that farmers registered more animals than were eligible for, or were likely to be put into, the scheme. Since January 1997, the number of animals being entered for the scheme has in the main stabilised at the average pre-crisis level of about 15,000 a week.

2.52 The Intervention Board incurred significant costs in obtaining cold storage facilities as a temporary buffer for material intended for rendering - in the region of £30 million in 1996-97, including transport. During 1997, the Board eliminated stocks of Over Thirty Month carcasses in cold stores by utilising spare rendering capacity following the clearance of the backlog. The Board has sought to use the resultant storage space for intervention or to dispose of it by the early termination of contracts.

Weekly slaughter rates under the Over Thirty Month Scheme in the United Kingdom



Notes: 1. Casualty animals are excluded. Their inclusion would increase the slaughter rate to over 60,000 in early November 1996.

2. Figures for May and June are not separately available on a weekly basis for cows and beef.

Source:
National Audit Office analysis of

The weekly slaughter rate increased from an average of 25,000 in May and June 1996 to a peak of just under 60,000 in November 1996.

Advance payments

2.53 At the start of the scheme the delays faced by farmers in getting their animals into the scheme led to concern by Ministers that some farmers were induced to sell their animals at below-scheme prices to dealers or others who could afford to hold them for entry into the scheme at a later date. Ministers were also concerned that the top up payments made under schemes existing before the crisis (Beef Special Premium and Suckler Cow Premium Schemes) would not address this problem.

2.54 The Ministry therefore amended the Over Thirty Month Scheme regulations to allow the Intervention Board to make advance payments to farmers of £300 per animal. These advances were made on condition that they would be subsequently recovered from payments made when the animals were presented for slaughter or, if necessary, by direct recovery action. The Ministry confirmed with the European Union that such advances would be legal, and delegated the responsibility for administering them to the Intervention Board.

2.55 In June 1996, the Board sent out application forms to some 150,000 farmers inviting them to apply for advance payments. Almost 5,000 forms were returned by the deadline of 28 June 1996, of which 4,700 were accepted. Advance payments were made by the Board in July and amounted to £13 million. These arrangements applied only for that one month and were not repeated.

2.56 The Board was unable to recover advances through deductions from claims when the animals were presented for slaughter, in particular because of the absence of a computerised payments system. Instead, in November 1996 when the backlog had been eradicated, the Board issued invoices to obtain repayments from farmers. This recovery process was complicated by the fact that some - but not all - collection centres had deducted advance payments by reducing the compensation payments passed on to farmers. Where this occurred, the Board invoiced the collection centre in lieu of recovering the advance payments from the farmer. In some cases disputes arose as to where liability lay for repayment of advances. Difficulties in recovering advances also arose in cases where animals had changed hands between payment of the advance and the eventual recovery.

2.57 As at 30 September 1997, some £2.6 million (20 per cent) of these advances, relating to 743 farmers or collection centres, was still outstanding. This included £774,000 on which the Board had secured commitments to repay; and £293,000 which was in dispute. A further £79,000 related to farmers who had gone into liquidation or were not traceable. The Intervention Board took steps to

recover outstanding amounts and, as at September 1997, had issued some 127 letters in preparation for legal proceedings. By the end of March 1998, the situation had improved so that the amount outstanding had reduced to £1.5 million, of which £0.3 million was covered by agreements to repay in instalments.

Conclusion

The National Audit Office concluded that:

- earlier implementation of a registration system might have helped in estimating the backlog of cattle awaiting slaughter, regulating access to the scheme and establishing priorities in appropriate cases; however, the over-registration of animals casts some doubt on the accuracy of the system and might have led to provision of processing capacity which was not actually needed;
 - the Board implemented an effective range of measures to eliminate the backlog; these measures proved their worth in that the rate of animals processed rose to 60,000 a week by the autumn of 1996, such that farmers subsequently experienced no delays in securing access to the scheme;
 - in view of the delays before farmers could present unsaleable cattle for slaughter, it was reasonable for the Ministry and Board to make advance payments to them; and
 - however, it is unsatisfactory that, because of the absence of a computerised payments system, the advances paid in July 1996 were not quickly recovered from the main payments, such that £2.6 million remained outstanding at September 1997 and that legal proceedings may need to be taken to recover some of them.
-

Systems for processing and paying claims

2.58 In view of the need to implement systems for processing and paying large numbers of claims on a scheme not in existence prior to the BSE crisis, the National Audit Office examined:

- the problems surrounding the introduction of a computerised system for payments;
- the checks carried out to ensure that the claims for payment were in accordance with scheme requirements; and
- a sample of payments made under the scheme.

Introduction of computer system

2.59 In order to administer the Over Thirty Month Scheme, the Board hoped to implement by May 1996 - only two months after the crisis began - a comprehensive computer system which would satisfy European Union accounting requirements and which would capture the data for each animal for which compensation was claimed. However, the Board was unable to meet this demanding target because

the scheme's data requirements were more complex than anticipated and because there were changes to the scheme during 1996 which affected the implementation of the system. Accordingly they installed an interim system which captured only payment data. This resulted in:

- considerable manual work in calculating payments and supplements;
- an inability to carry out adequate checks, e.g. to ascertain whether the same animal had been included on two or more claims;
- difficulty in recovering advances from subsequent payments when the animals were presented (paragraph 2.56);
- delays in making claims for reimbursement from the European Union;
- an inability to give detailed information to claimants on the animals covered by a payment. This caused substantial difficulties for abattoirs and markets in identifying the amount paid in respect of individual animals. Since January 1997, the Intervention Board has tried to provide more information in order to assist abattoirs and markets in reimbursing farmers.

2.60 The introduction of the new computer system was delayed due to programming difficulties. The Board had underestimated the size of the project and it was some months before a project board was set up to oversee the task. Even then, there was some difficulty within the Intervention Board in agreeing a specification for developing the software and for using it. In November 1996, the Board embarked on entering detailed claim data retrospectively in anticipation of the new system. But this exercise has had to be continued far longer than planned as the new system did not become operational until 4 August 1997.

Conclusion

The National Audit Office concluded that:

- because the Intervention Board underestimated the size of the task, it was unable to meet its own deadline for implementing a computerised system for recording and making Over Thirty Month payments;
 - this obliged the Board to implement an interim system, the shortcomings of which gave rise to difficulties for farmers, abattoirs, markets and the Board; and
 - it is particularly disappointing that these shortcomings adversely affected the Board's ability to control both the payments which they made and the recoveries which were due to them.
-

Administrative and other checks carried out by the Intervention Board and agents

2.61 As agents of the Intervention Board, staff from the Meat and Livestock Commission (Livestock and Meat Commission in Northern Ireland) and Meat Hygiene Service (Department of Agriculture in Northern Ireland) are responsible for carrying out various checks at markets, abattoirs, rendering plants, incinerators, stores, hide markets and tanneries (Figure 15). In addition, staff from the Board's technical inspectorate regularly visit the same premises in England and Wales in order to check adherence to scheme regulations. Similar checks are made in Scotland by part of the Scottish Office Agriculture, Environment and Fisheries Department and by the Department of Agriculture in Northern Ireland.

2.62 At the Intervention Board, claims from abattoirs and markets are checked and payments calculated. Steps include:

- checks to see that there is documentation supporting the eligibility of the animals and any top-ups claimed. These include a correctly completed farmer's declaration covering every animal submitted, though this requirement was only introduced in August 1996.
- checks that claims have been fully authorised, signed and stamped by Meat Hygiene Service and Meat and Livestock Commission staff, though the latter were only required to do so from July 1996;
- calculations of the payment due. This can involve analysing and aggregating the weights of each class of animal claimed, and separately analysing top-ups or supplements.

Other work carried out by the Board's verification teams and Anti-Fraud Unit is covered in paragraphs 4.24 to 4.27.

2.63 The compensation due to the producer is paid by the Intervention Board to the collection centre where the animals were presented. The collection centre must operate a trustee account and forward compensation payments to the farmer within 14 days of receipt from the Board. Collection centres (abattoirs, markets, incinerators) make claims weekly and a single claim may cover a large number of animals from many different farmers. In the case of a complex claim, which might

Meat and Livestock Commission, Meat Hygiene Service and Technical Inspectorate Responsibilities

Figure 15

Meat and Livestock Commission

- checks eligibility of animals against documentation;
- weighs carcasses hot and records all weights on documentation, stamps and signs kill sheets and sends them with supporting documents to the Board.

Intervention Board Technical Inspectorate

- oversees the performance of the operators and agents to ensure that it conforms to expected levels;
- undertakes unannounced visits to each type of premise used within the scheme;
- reports to the Board on the operations and ensures that deficiencies are noted and recorded;
- provides technical advice to the Board and/or agents as necessary in the meat and livestock area.

Meat Hygiene Service

- oversees every slaughter at the abattoir;
- undertakes a physical inspection of all animals prior to slaughter, checks documentation for eligibility and reconciles eartags to documentation;
- checks eligibility of animals - fit for human consumption, free from clinical signs of BSE and over 30 months;
- checks the slaughter of animals and ensures that the disposal is by approved and sealed methods;
- safeguards animal welfare;
- undertakes post-mortem check of animals including dentition;
- supervises the dressing of carcasses, removal of specified bovine material, weighing of offal and Specified Bovine Material;
- ensures sufficient disfiguring and staining of carcass and other material;
- checks and endorses all relevant scheme documentation with the Meat and Livestock Commission;
- maintains hygiene rules in premises at all times;
- ensures the removal of all scheme material on day of slaughter by approved renderers;
- maintains security of scheme material and ensures separation from other material throughout operations;
- records and reconciles all weights on documentation for onward transport of material.

Note: In Northern Ireland, the Livestock and Meat Commission and the Department of Agriculture Northern Ireland are responsible for all checks. In Scotland, the Scottish Office is responsible for technical inspections.

cover as many as 1,000 animals, the clerical checking and calculation could take several days. The Board has set an internal target of 14 working days from the receipt of a claim to the payment to the collection centre; the Board's published target is 21 days.

National Audit Office sample testing of transactions

2.64 The National Audit Office examined a statistical sample of 97 payments to collection centres covering the 1996-97 financial year. The sample included 64 payments to abattoirs, 29 to markets, two to incineration plants and two advance payments. The total value of the claims examined was £11.6 million and covered some 17,600 animals. The National Audit Office checked whether the compensation payments and slaughter fees were arithmetically correct; whether the Intervention Board had confirmed the eligibility of all animals included in the claim; and whether the claims had been authorised by the Meat Hygiene Service or by the Meat and Livestock Commission. As the size of claims ranged from 7 animals to one claim for £530,000 involving over 1,000 animals, the National Audit Office's testing often involved a complex reconciliation of data.

2.65 The National Audit Office found that:

- the Board strengthened its controls in August 1996 by requiring farmers to submit identification details for all animals in their claim;
- at collection centres, officers from the Meat Hygiene Service or the Meat and Livestock Commission rejected any animals which did not have ear tags or where cattle identification documents were incomplete. Inspections are carried out after the animal has been slaughtered and farmers are notified if their animal has been rejected;
- the Board rejected any animals within a claim where there was insufficient supporting documentation to confirm the animal's eligibility or where the claim did not match the documentation received from the collection centre. In such cases, the Board withheld payment until the farmer or collection centre provided the necessary evidence; and
- abattoirs and incinerators receive slaughter fees and incineration fees for rejected animals even when farmers cannot provide documentation to support their claim. In 1996-97 the Board rejected some 5,200 animals, 0.4 per cent of all those slaughtered.

2.66 The National Audit Office's transaction testing found a total of 47 payment calculation errors in the 97 claims examined (Figure 16). Those errors occurred on 26 claims, ten of which included more than one error and one claim contained seven errors. All of the errors occurred on compensation payments to farmers via abattoirs. Errors were more likely to occur on these payments to abattoirs, as such claims were relatively large, and were more complex to process, compared to claims from markets and incineration plants: the average value of sample claims from abattoirs was £167,000 on 248 animals, compared to claims of £28,000 on 56 animals from markets and incinerators. While no errors were found on payments to markets or on slaughter fee calculations in the samples tested by the National Audit Office, 40 per cent of the 64 claims submitted by abattoirs contained errors.

Figure 16**Analysis of the types of error found - by number and value**

Type of error	Overpayments		Underpayments		Total Value of Errors	
	No.	Value (£)	No.	Value (£)	No.	Value (£)
Weight recorded incorrectly	11	1033.15	9	1337.92	20	2371.07
Animal omitted from payment	-	-	11	5986.29	11	5986.29
Animal included twice	6	3717.57	-	-	6	3717.57
Arithmetical error in payment calculation	2	79.30	3	2164.13	5	2243.30
Misclassification of animals	1	2.38	1	578.49	2	580.87
Lack of supporting evidence for animals	2	1648.89	-	-	2	1648.89
Rejected animal included in payment	1	627.53	-	-	1	627.53
Total	23	7,108.82	24	10,066.83	47	17,175.65

The National Audit Office found 47 errors in the calculation of payments amounting to just over £17,000 in total.

Source: NAO analysis of payments

2.67 The gross value of the sample errors was £17,176, which equates to 0.17 per cent of the value of the compensation payments made on the claims examined by the National Audit Office. Extrapolating this level of error across the value of compensation payments made in 1996-97 of £670 million would amount to a gross error of some £1.1 million. The error rate on the number of animals processed under the claims sampled was very small; the National Audit Office found that claims for only 49 of the 17,640 animals covered by the sample had been processed incorrectly, an error rate of approximately one in 360.

2.68 The large majority of errors resulted from clerical mistakes in payment calculations (Figure 16). The most common type of error was the incorrect recording of the animal's weight on the payment calculation (20 cases) followed by omitting an animal from the payment calculation (11 cases); including the same animal twice (six cases); and making arithmetical errors in the payment calculation (five cases). The National Audit Office found only three cases where ineligible animals had been included in the payment; one of these was a clerical error involving a rejected animal in the claim.

2.69 The National Audit Office noted that the Intervention Board had been obliged to recruit a significant number of staff to process payment claims; and that this may have contributed to the level of inaccuracies. Administration aspects, including staffing, are considered in Part 4 of this report.

Conclusion

The National Audit Office concluded that:

- the combination of the verification of the animals by the Meat and Livestock Commission or by the Meat Hygiene Service and the Board's checking of claims to supporting documentation should provide strong controls to ensure that payments are not made for ineligible animals;
 - errors were more likely to occur in payments to abattoirs. The sample testing results showed errors of 0.17 per cent of the value of compensation payments which, when extrapolated across the total value of such payments on this scheme in 1996-97, indicated a possible total error value of some £1.1 million;
 - as all claims should be checked for arithmetical accuracy and completeness before being paid, the Board should ensure that these checks are performed satisfactorily; errors occurred more frequently on claims with supplementary payments; and
 - clerical inaccuracies identified by the National Audit Office resulted from the size and complexity of the claims, the short payment-time targets, and the inexperience of newly recruited staff. Most of the inaccuracies could have been avoided if the Board had implemented its computerised payments system sooner.
-

Part 3: Other schemes and market support measures

Introduction

3.1 The Over Thirty Month Scheme was the largest of the schemes brought into immediate effect in response to the beef crisis. However, while the scheme would provide work for abattoirs, renderers and others, the risk of a disorderly collapse of the beef industry led the Ministry to introduce a series of other schemes to support the market. These were designed to address the immediate short term problems following the beef export and animal feed bans by cushioning the impact on some sectors of the industry and on the market relationship between those sectors.

3.2 In addition, the Ministry started work on a selective cull scheme, a cattle traceability system and beef assurance and certified herd schemes as measures with the longer term objective of restoring consumer confidence and securing the lifting of the beef export ban imposed by the European Union.

3.3 This part of the report contains the results of the National Audit Office's examination of:

- the Calf Processing Aid Scheme
- other short term market support measures
- the Selective Cull
- cattle traceability systems
- the beef assurance and certified herd schemes

Calf Processing Aid Scheme

3.4 Given that the Calf Processing Aid Scheme was introduced immediately after the collapse in the beef market, the National Audit Office examined:

- the key features of the scheme;
- a sample of transactions.

Key features of the scheme

3.5 European Union legislation introduced in 1992 allows member states to operate a calf processing scheme, aimed at reducing supply following a decline in the beef market. Prior to 1996, no member state had introduced such a scheme. Following the loss of export markets for UK calves, the United Kingdom activated the scheme with effect from 22 April 1996. The European Union subsequently imposed a requirement on all member states to operate either the Calf Processing Aid Scheme or an Early Marketing Scheme for veal. The Calf Processing Aid Scheme provides for the slaughter and safe disposal of very young male calves.

3.6 Payment rates are determined by the European Commission Beef Management Committee and are set in ECUs at a flat rate per calf based on market prices. Since the scheme was introduced, changes in the eligibility and payment rates have been made to reflect the market position. In addition, fluctuations in the agricultural exchange rate used in the conversion of ECUs into £ sterling have led to successive reductions in the payment rates. All these changes are reflected in Figure 17.

3.7 In 1996-97 the Intervention Board paid some £51.4 million for the slaughter of approximately 540,000 calves. From 1 April 1997 to 30 September 1997 a further 295,000 calves were slaughtered at a cost of £24 million. Total expenditure in 1997-98 was forecast to be £54 million. The aid under this scheme is fully reimbursable by the European Union.

3.8 The Intervention Board is responsible for administering the scheme and the Meat and Livestock Commission, Meat Hygiene Service and State Veterinary Service act as its agents for making the appropriate physical checks and in checking or preparing relevant documentation. The role and responsibilities of the various parties are set out in Figure 18.

Payment Rates and Eligibility Under the Calf Processing Aid Scheme

Figure 17

Date	Action/Change/Eligibility	Fee rate
22 April 1996	Scheme activated in UK, male calves under 10 days old from specified dairy breeds are eligible for aid	■ 120.8 ECUs (£103.47) for each calf
26 July 1996	Age limit raised to under 20 days old	■ 120.8 ECUs (£103.47) for each calf
1 December 1996	Criteria expanded to include all male calves under 20 days old i.e. in addition to dairy breeds, other breeds such as beef, beef/dairy cross and dual purpose breeds became eligible	■ 120 ECUs (£102.79) for each dairy and pure dairy cross calf ■ 150 ECUs (£128.48) for other calves
1 January 1997	Revaluation of exchange rate used in converting ECU's into sterling	■ 120 ECUs (£97.19) for dairy calves ■ 150 ECUs (£121.49) for other calves
1 March 1997	Revaluation of exchange rate	■ 120 ECUs (£92.18) for dairy calves ■ 150 ECUs (£115.23) for other calves
1 May 1997	Revaluation of exchange rate	■ 120 ECUs (£89.08) for dairy calves ■ 150 ECUs (£111.35) for other calves
19 May 1997	Reduction in rates determined by the European Commission	■ 115 ECUs (£85.37) for dairy calves ■ 145 ECUs (£107.64) for other calves
1 August 1997	Revaluation of exchange rate	■ 115 ECUs (£82.90) for dairy calves ■ 145 ECUs (£104.52) for other calves
10 October 1997	Revaluation of exchange rate	■ 115 ECUs (£80.01) for dairy calves ■ 145 ECUs (£100.88) for other calves
22 December 1997	Harmonisation of rates by the European Commission	■ 115 ECUs (80.01) for all calves

Payment rates under the Calf Processing Aid Scheme have steadily reduced.

Figure 18

Responsibilities in the Calf Processing Aid Scheme

The Intervention Board is responsible for operating the Calf Processing Aid Scheme by:

- registering abattoirs
- publishing scheme literature and forms
- checking and processing claims for calves from abattoirs
- initiating verification programmes at abattoirs
- arranging necessary inspection visits to farms

The State Veterinary Service checks that abattoirs applying for approval under the scheme have the facilities suitable for processing calves.

The Meat Hygiene Service acts on behalf of the Intervention Board to:

- check the eligibility of every calf (ante-mortem)
- safeguard animal welfare
- oversee all slaughtering and disposal of material
- complete appropriate paperwork
- ensure that resultant material is dispatched in a secure form

The Meat and Livestock Commission acts on behalf of the Intervention Board by:

- checking the eligibility of every calf (post-mortem) in high throughput abattoirs
- in conjunction with the Meat Hygiene Service, completing scheme documentation

Abattoirs registered to participate in the scheme are responsible for:

- notifying the Board of intended slaughter times
- checking the eligibility of calves
- slaughtering the calves
- disposing of the carcasses
- maintaining good records
- paying the Meat Hygiene Service for its services

Farmers/producers negotiate direct with markets and abattoirs on the sale of eligible calves.

Note: In Northern Ireland, the appropriate checks are carried out by the Department of Agriculture Northern Ireland.

3.9 Abattoirs registered to operate under the scheme are paid a flat rate for each of the calves they slaughter. Farmers and abattoirs make their own contractual arrangements. The abattoirs are responsible for presenting calves into the scheme, for their slaughter and for the safe disposal of the resultant material. In 1996-97 the Board registered 122 abattoirs under the scheme, although only 89 participated in that year. The Board rejected seven abattoirs as not satisfying the conditions for registration. A full re-inspection and re-registration was undertaken in 1997 as a result of which 44 abattoirs were approved.

Transaction testing by the National Audit Office

3.10 The National Audit Office reviewed the system at the Intervention Board for processing Calf Processing Aid Scheme claims. In order to examine the operation of the controls in more detail, the National Audit Office examined 31 claims from abattoirs under the scheme in 1996-97. One of the claims selected at random was from an abattoir being investigated by the Board's Anti-Fraud Unit but, in order not to interfere with that investigation, it was not examined. The remaining 30 claims covered the whole of the United Kingdom, including four from Wales; three from Scotland; one from Northern Ireland; and the remainder from England. The claims examined had a total value of £2.3 million and were for some 22,500 calves from 30 of the 89 participating abattoirs.

3.11 The National Audit Office reviewed whether the claims were arithmetically correct, had been properly checked and met the criteria for support under the scheme regulations and whether the Board had taken action to address weaknesses. The National Audit Office found errors in eleven cases, in seven of which the Board had already identified the mistake:

- three claims were signed but not stamped appropriately by the official veterinary surgeon; this occurred in the first few weeks of the scheme when guidance had not reached all official veterinary staff - no cases containing this error were found in the sample claims from May 1996 onwards;
- on one claim the official veterinary surgeon had signed some forms before the processor had completed it and it contained 10 ineligible animals; and
- seven claims contained one or more ineligible calves which had been passed by the official veterinary surgeon at the abattoir. But this had been picked up by the administrative staff at the Intervention Board.

3.12 Between June and October 1997 the Board instituted additional controls to reconcile the number of calves presented with the carcasses disposed of in order to counteract the weaknesses of this type and others identified from the results of work by the Board's Anti-Fraud Unit and other inspectors. This work is covered in Part 4 of this report.

Conclusion

The National Audit Office concluded that:

- the Calf Processing Aid Scheme had been appropriately implemented under relevant European Union regulations; and
 - errors in claims had occurred but checks carried out by the Board and action taken to address weaknesses were adequate.
-

Other support measures

3.13 The Government with the agreement and support of the European Union introduced a series of other measures to support the United Kingdom beef industry. These schemes involved:

- short term support to specific sectors of the market (Beef Marketing; Slaughtering Industry (Emergency Aid) Scheme (throughput element); Rendering Industry Support Schemes, Movement of Hides Scheme).
- collection, storage and disposal of beef and beef products made unsaleable by the crisis, Slaughtering Industry (Emergency Aid) Scheme, Beef Stocks Transfer Scheme; Beef and Beef Products (Storage and Disposal Services) Scheme; and of mammalian meat and bone meal or feed containing it (Feed Recall Scheme).
- increased expenditure on existing schemes (Beef Special Premium, Suckler Cow Premium Schemes; Hill Livestock Compensatory Allowances; purchases into intervention).

3.14 The National Audit Office reviewed the general purpose, duration and beneficiaries of the schemes, whether they were funded nationally or by the European Union, and the total expenditure incurred in 1996-97. A summary of the results of this review is given in Figure 19.

Figure 19**Other schemes responding to the BSE crisis**

Scheme	Description	Expenditure	
		1996-97 £m	1997-98 estimated £m
Beef Marketing Payment Schemes	To support farmers affected by the fall in market prices, flat rate headage payments were made on adult cattle marketed for human consumption in 1996 between 20 March and 30 June (£66.76 per animal); 1 July and 30 September (£55); and 1 October and 9 November (£34). Part funded by European Union	58	0
Slaughtering Industry (Emergency Aid) Scheme	Part of package of support to help avert risk of collapse of the normal meat supply chain by keeping essential links open.		
(i) Throughput element	Payments of £9.50 per animal to slaughterhouses who continued to slaughter bovine animals in 1996-97, based on 1995-96 throughput.	30	0
(ii) Beef Stocks Transfer Scheme	Purchase by the Intervention Board of unsaleable beef owned by operators of licensed slaughter houses and cutting plants on 9 April 1996 and arrangements for its storage and disposal.	51	5 ¹
Rendering Industry Support (1996-97)	Payment based on loss of income by comparison with 1995-6 and taking broad account of changes in renderers' costs and throughput. Renderers had to maintain pre-March 1996 prices and charges to the abattoirs.	87	11 ²
Rendering Industry Support (1997-98)	Based on individual renderers' production of tallow and unsaleable meat and bone meal. Phased out by year end. No obligation to maintain prices and charges, but support is transparent to suppliers.	0	58
Beef and Beef Products (Storage and Disposal Services) Scheme	Intervention Board arranged for the storage and disposal of meat made unsaleable by the crisis which was held by traders who wished to use this service. Traders received no payment for their product.	1	2 ¹
Feed Recall	Covered the cost of collection, storage and disposal to ensure safe destruction of feed now banned from use as animal feed.	0.3	1 ¹
Support to hide industry	Payable to registered tanners and British Leather Confederation to compensate for loss of value of by-products from hide processing and for additional handling costs for the trimmings and to ensure their safe destruction. (£4.75 per hide)	4	3
Beef Special and Suckler Cow Premium Top Ups³	Supplementary payments made under existing producer support schemes, involving headage payments to farmers based ultimately on numbers of animals eligible under schemes in 1996. Funded by European Union.	120	8
Hill Livestock Compensatory Allowances³	Increase to existing payment to holders of bovine animals.	60	0

continued..

Figure 19

continued

Scheme	Description	Expenditure	
		1996-97	1997-98 estimated
		£m	£m
Purchases into Intervention³	<p>Intended to support prices. Such purchases have increased due to BSE crisis and loss of markets. Eligibility extended to cover young bulls.</p> <p>The Intervention Board also repurchased intervention stocks worth £2.4 million which had been sold just prior to the announcement on 20 March 1996.</p> <p>Funded by European Union.</p>	170	180

- Notes: 1. Estimated expenditure in 1997-98 relates to continuing cost of storage and disposal
 2. Not including an amount subject to debt recovery action
 3. Extension to existing schemes

Various short term measures or extensions to existing schemes were implemented to support sectors of the beef industry

Various short term measures or extensions to existing schemes were implemented to support sectors of the beef industry.

3.15 In view of the variety of schemes introduced and because there was some urgency behind the development of the new and temporary schemes, the National Audit Office reviewed:

- whether there was overlap between the schemes, providing apparently duplicate aid to sectors of the beef industry; and
- whether the schemes had statutory authority and appropriate criteria against which to determine the eligibility of applicants.

3.16 In order to arrive at conclusions on these issues, the National Audit Office examined the purpose and nature of each scheme as described above and in more detail how the rates of aid payable were determined, taking account of the objectives of the scheme and nature of the market. The results of this examination are contained in Appendix 2. Although not examined in detail, this review also indicated that the Ministry and Board had adequate systems in place for claim processing and checking.

3.17 The National Audit Office also analysed the amounts paid to each sector of the industry under these and other schemes examined in this report, covering both direct support and additional work. The results are at Figure 20 on page 60.

Conclusion

The National Audit Office concluded that:

- there was no overlap of schemes; some sectors received aid from more than one scheme but the aid was in support of different aspects of their trade. The purpose was to support the industry and the market prices rather than to compensate those affected by the crisis;
 - appropriate eligibility criteria were set for each scheme and all schemes had the appropriate statutory authority. For some, the Departments relied initially on the authority of the Appropriation Act. Treasury approval was also given, although the Ministry was late in obtaining the Treasury authority for the Movement of Hides Scheme;
 - payment rates were generally determined by deciding how to distribute the total amount of aid made available under national or European Union funding allocations; and
 - schemes were set up with regard to administrative costs and effort except for the original top ups to the Beef Special Premium Scheme and the Suckler Cow Premium Scheme. In these two cases, significant administrative effort was necessary to adjust payments where the number of animals claimed for differed between 1995 and 1996 as required by the European Regulations. However, as these were supplementary payments under existing schemes, they were cost-effective to administer.
-

Selective Cull

3.18 Whereas the majority of schemes examined by the National Audit Office were seeking to avert the collapse of the beef industry and to support market prices, the selective cull in principle is aimed at getting the export ban on United Kingdom beef lifted by a slaughter policy which will reduce the number of cases of BSE. It is part of the response to the pre-conditions for lifting the export ban discussed at the European Council on 21 June 1996 (paragraph 1.8). The National Audit Office examined:

- the background to the scheme, its purposes and objectives;
- whether the selection of animals which would be culled was effective in meeting those objectives; and
- progress made in implementation compared with plans and whether compensation payable was related to market value.

Figure 20**Total amounts paid to elements of the beef industry**

		Farmers, Producers	Slaughterers	Renderers	Tanners	Others ¹	Total
		£m	£m	£m	£m	£m	£m
Over Thirty Month Scheme	96-7	670	71	55		62	858
	97-8	255	23	42		72	392
Calf Processing²	96-7		51				51
	97-8		54				54
Selective Cull	96-7	0	0	0		0	0
	97-8	110	2	4		3	119
Beef Marketing	96-7	58					58
Slaughtering Industry (Emergency Aid)	96-7		78			3	81
	97-8					5	5
Rendering Industry	96-7			87			87
	97-8			69			69
Beef & Suckler Cow Premium	96-7	120					120
	97-8	8					8
Hill Livestock Compensatory Allowances	96-7	60					60
Other¹	96-7				4	1	5
	97-8				3	3	6
Total		1,281	279	257	7	149	1,973

- Note: 1. Includes Animal Feed Recall Scheme, Beef and Beef Products (Storage and Disposal Services) Scheme, and the costs of incineration, storage and transport under those and other schemes. Excludes intervention purchasing.
2. From the fees received from the Calf Processing Scheme, slaughterers will have paid farmers for the animals and are responsible for disposal of carcasses.

Farmers received payments under most of the Schemes. Some elements of the industry received payments under both slaughter schemes and industry support schemes.

Farmers received payments under most of the Schemes. Some elements of the industry received payments under both slaughter schemes and industry support schemes.

Background to the scheme and its objectives

3.19 Spongiform encephalopathies have long incubation periods. The objective of the Selective Cull scheme is to identify animals most at risk of contracting BSE, in order to reduce the incidence of the disease further. Concern has primarily focused on animals born after the ban on feeding ruminant protein to bovine animals, which took effect from 18 July 1988. Experts consider that this ban was not immediately fully effective and that some animal feed continued to include infected

bovine material. The incidence of BSE in animals born after that date is likely to have been caused by contaminated feed which they may have eaten in the first six months of their lives; and that other animals most at risk are those which may also have been exposed to the same feed, namely those born around the same time and within the same herds as confirmed BSE cases. By identifying these animals and slaughtering them, experts thought that the incidence of the disease would be reduced more quickly than would otherwise be the case, but that the selective cull would not advance the date of final eradication.

3.20 Soon after 20 March 1996, pressure for the United Kingdom to operate a selective cull, with the objective of speeding the elimination of the disease, was applied by the European Commission. This reflected the views in other member states. However, calculations by the Ministry indicated that a selective cull on its own would have only a very limited effect on the epidemic. But the concept had also to be viewed against the political situation, in particular the desirability of reducing political confrontation in Europe and finding a way forward which could lead to the lifting of the ban on United Kingdom exports. It was for these reasons that proposals for a selective cull were included in the United Kingdom eradication programme, approved by the European Standing Veterinary Committee on 19 June 1996, which formed an integral part of the Florence agreement reached by the European Council on 21 June 1996. However, the final decision by the United Kingdom to proceed was not taken until December 1996.

3.21 Following the Florence agreement in June 1996, the Ministry began more detailed planning for a selective cull. This work was suspended in September when the Government announced that it would not proceed until the rationale for the scheme had been considered further. This decision was partly influenced by the publication of research suggesting that the BSE epidemic would decline to negligible proportions in the United Kingdom by the year 2000 and that BSE would die out even in the absence of any form of selective cull. In December 1996, the suspension of work on the cull was lifted in view of continuing European Union concerns and the export ban. However, implementation of the scheme required a lot of work and the design of two separate computer systems in the Ministry and one in the Intervention Board to assist in identifying animals and calculating the payments due. The scheme came into operation in January 1997, the first animals being slaughtered on 28 February 1997 in Northern Ireland and 21 March in Great Britain.

3.22 The statutory basis of the scheme is European Commission Decision 96/385 and European Regulation 1484/96, which came into force on 1 August 1996. The Regulation provides for 70 per cent of the market value of animals slaughtered to be reimbursed from European Union funds. Responsibilities for

policy aspects of the scheme lie with the Ministry's Animal Health Division, while the Ministry's State Veterinary Service is responsible for operating it through its central headquarters and its network of regional Animal Health Offices. The Intervention Board is responsible for making compensation payments to farmers on the basis of information provided by the Ministry and for the collection, slaughter and disposal arrangements. The Department of Agriculture, Northern Ireland is responsible for making payments in Northern Ireland. The total cost of the scheme is likely to be about £160 million, £0.1 million of which was incurred during 1996-97.

Selection of animals to be culled

3.23 Implementing the Selective Cull involves several distinct stages as shown in Figure 21.

The steps involved in implementing the Selective Cull

Figure 21

- using the epidemiological database at the Veterinary Laboratories Agency in Weybridge to identify all confirmed cases of BSE in animals born after the ruminant protein ban;
- tracing these animals back to the herd in which they were born or reared for the first six months (the "natal herds");
- identifying within those herds other animals in the same "cohort" (i.e. born in the same season) and assessing whether they were exposed to the same feed. If more than one cohort is affected, separate natal herd reports are completed for each cohort year;
- tracing all these other "exposed" animals, or establishing that they have been slaughtered;
- arranging for the valuation and slaughter of "exposed" animals.

The process of tracing and identifying exposed animals is iterative, since within a single herd they may have come from a variety of sources.

The process of tracing and identifying exposed animals is iterative, since within a single herd they may have come from a variety of sources.

3.24 In this process a key concept is that of the cohort year. This was intended to cover all calves which were born in the same season as a confirmed BSE case. However, for practical purposes the Ministry initially defined it as follows (Figure 22):

Voluntary and compulsory cohort years

Figure 22

Voluntary cohort year	1989-90	1 July 1989 to 14 October 1990
Compulsory cohort years	1990-91	15 October 1990 to 30 June 1991
	1991-92	1 July 1991 to 30 June 1992
	1992-93	1 July 1992 to 30 June 1993

This shows the cohort years defined as the basis for identifying animals born in the same season as a confirmed case of BSE.

3.25 Only animals born within the same cohort year as a BSE case would be assessed for possible inclusion in the cull. As the requirement to maintain birth records had been in effect only since 15 October 1990, the Ministry did not consider it equitable to require farmers to offer animals for slaughter born before that date though they may do so voluntarily. By contrast, exposed animals in the compulsory cohort years have to be slaughtered.

3.26 When the scheme was first implemented the Ministry defined potentially exposed animals as those within the same cohort year as “born after the ban” cases; and the cohort years were rigidly defined as in Figure 22 above. While the National Audit Office appreciated that limits had to be imposed on any selective cull, the effect of this guidance was illogical as it could exclude animals which may have been born soon after or before a confirmed BSE case and which were known to have received the same potentially infected feed. For example, a confirmed BSE case born in a herd on 20 June 1992 would have been classified as being born in cohort year 1991-92. Other animals born in the period 1 July 1991 to 30 June 1992 in that herd would have been considered for inclusion in the selective cull, while animals born in July 1992 or later would have been excluded - even if it might be clear that they were given the same feed. This is of particular importance since most BSE cases have occurred in dairy herds where in some cases there is no distinct calving pattern, as opposed to beef herds where calving is generally seasonal.

3.27 On 5 June 1997, some four months after the scheme had begun, the Ministry issued urgent instructions to all its Animal Health Offices to rectify this weakness. The new guidance redefined the cohort year by stipulating that all animals born six months either side of a “born after the ban” case had to be considered. However, the guidance did not make it clear whether herds already processed should be re-examined; some Animal Health Offices effectively suspended operation of the scheme pending clarification of this issue.

3.28 Up to 6 June 1997 the Ministry's animal health officers had visited over 2100 herds. Some offices, such as Leeds, had virtually completed all the compulsory cohort visits and tracing of animals and intended to focus on the voluntary cohort herds. If the new guidance were to be applied retrospectively, many herds would need to be re-visited to identify and trace potentially exposed animals. More detailed instructions issued by the Ministry on 19 June 1997 required animal health officers only to re-visit herds already examined if the farmer requested a reassessment. Therefore the choice, on the advice of the Ministry's lawyers, was left to the farmer on whether to continue with the definition of the cohort year applied at the start of the scheme or to apply the new definition.

3.29 The National Audit Office noted a number of other factors relating to the scope and effectiveness of the Selective Cull:

- “born after the ban” BSE cases in the voluntary cohort year affect some 6,000 herds. By contrast, “born after the ban” cases in the compulsory cohort years only affect 3,000 herds. The effectiveness of the cull therefore largely depends on the readiness of farmers to offer animals within the voluntary cohort year, in the absence of any sanctions which the Ministry can impose. As at June 1997 relatively few visits had been made to herds in the voluntary cohort year and the extent to which farmers were or were not offering animals from the voluntary year was therefore unclear.
- the scheme only covers the period up to June 1993. It was not designed to include “born after the ban” cases which were born after that date, and the herds within which they were born.
- the cull was based on the list of “born after the ban” BSE cases as at January 1997. It was not designed as an on-going programme to follow up confirmed BSE cases arising after that date, even if their date of birth falls within the relevant cull cohort years. The list of cases identified comprised some 16,700 animals.
- about 800 “born after the ban” cases cannot be traced to their natal herd; therefore other animals within those herds and exposed to the same feeds cannot be identified. In addition, there are around 2,000 cases where information about the natal herd could not be corroborated by farm records in the natal herd, mainly in the voluntary year before such records were mandatory.

Progress in implementation and compensation payable

3.30 Following delays in 1996 in planning and implementing the scheme, there were further delays in the early months of 1997 in the operation of the scheme due to the difficulty in identifying animals. This reflected the iterative nature of the process, the absence of a cattle traceability system, and frequently the poor records kept by farmers. In particular, the analysis of herd documentation and feeding records on farms was far more time-consuming than initially anticipated by the Ministry. The Ministry had hoped to complete the selective cull within six to nine months of implementing the scheme.

3.31 Some 16,700 “born after the ban” confirmed BSE cases were identified within all the cohort years. As at the end of September 1997:

- in some 13,000 cases the Ministry had verified where these cattle had been born by examining birth records on the farm;
- some 6,068 natal herd reports had been completed out of an estimated total of 9,415;
- the Ministry had identified and traced almost 80 per cent of cases within the compulsory cohort years, but only 57 per cent of those within the voluntary year. This reflected agreed priorities within regional Animal Health Offices;
- about 31,300 animals had been slaughtered under the scheme. The Ministry initially estimated in early 1996 that up to 128,000 animals might be affected. Numbers requiring slaughter were lower than expected partly because a significant proportion had been culled under the Over Thirty Month Scheme.

3.32 In Northern Ireland, the selective cull of 1,461 home-bred animals, a much lower number than in Great Britain, had been completed on 18 November 1997. The greater part of the cull had been completed in July. Tracing and identification of Northern Ireland cohorts was helped by information obtained from the animal health computer records maintained there.

3.33 Compensation payments to farmers amount to 90 per cent of the replacement value of female animals, or, if higher, the market value; or the market value for male animals. The replacement value is defined as the value of an animal of the same breed and quality in its first lactation. On this basis, an eight year old dairy cow, for example, would be valued as if it were two to three years old. The National Audit Office found that farmers might typically expect £1,000 for a non-pedigree animal, but substantially more for some pedigree cattle even though the animals being culled may have reached the end of their economically productive lives. The overall average payment per animal is about £1,400. In a few extreme cases, however, compensation payments have ranged up to £50,000. Valuation is generally carried out by two independent valuers, one chosen by the Ministry and another chosen by the farmer.

3.34 Taking into account the number of animals slaughtered from April 1996 to September 1997 and the compensation rate for that period, the average level of compensation paid to farmers under the Over Thirty Month Scheme was about £475 an animal. The levels of compensation available under the Selective Cull are considerably higher, reflecting the compulsory nature of the cull and the economic value to farmers of the animals selected.

3.35 Additional supplements are payable for “closed herds” (where no female bovine animal has been introduced since 15 October 1990) and for herds where more than 10 per cent of the animals are affected by the cull. The latter cases can become very complex to calculate where, for example, more animals are subsequently traced to the same herd or where a farmer subject to a compulsory selective cull later volunteers animals within the voluntary year. In such cases, the second compensation payment may include top-ups relating to the animals on which compensation has previously been paid. Payment calculations are performed by a dedicated computer system which was subject to testing of sample calculations before going live. There was no live testing of the accuracy of payment calculations after the system became fully operational. Data entry is subject to manual testing and a sample of final payment calculations performed by the computer is similarly tested. However, for those cases which involve top ups, these checks need to refer back to information on the herd size, which is held by the Ministry.

3.36 In order to maintain a clear audit trail in respect of the cull material and related documentation, scheme rules prescribe that the slaughter, rendering and storage of resulting meat and bone meal is kept entirely separate from Over Thirty Month material.

Conclusion

The National Audit Office concluded that:

- the Selective Cull was not designed with the intention of identifying all cases of cattle born in herds in the same season as a BSE case. Thus it did not include cattle born at the same time as those which were confirmed as having BSE after 1996 or cases which were born after June 1993. In addition, the scheme was voluntary for cattle born before October 1990 when the requirement for farmers to maintain birth records was introduced. The Ministry sought to adopt an approach which balanced the cost effectiveness and practicality of implementing the cull against maximising reductions in the future incidence of the disease;
 - the work on the cull might have been improved had the Ministry recognised from the outset the impact of those dairy herds where there is no distinct calving pattern. It was some four months before definition of the cohort year was revised to improve the identification of animals. By that time, 2,100 herds had been visited and most of the compulsory cohort visits had been made;
 - further extensions to the cull, however, would be of only limited effectiveness in reducing the incidence of the disease further. Scientific advice is that BSE is likely to die out even in the absence of any form of selective cull, and the cull is primarily intended to meet the conditions for lifting the European Union export ban;
 - the implementation of the Selective Cull was subject to problems in identifying animals and required the design of new computer systems; and
 - compensation payments to farmers are significantly greater than those available under the Over Thirty Month Scheme. Payments are based on the market value of young animals which means that farmers may receive more for older animals than if they had been able to sell their cattle on the open market in normal conditions.
-

Cattle traceability

3.37 Another element of the discussions at the European Council on 21 June 1996 on lifting the export ban was the need for an effective animal identification and movement recording system. The National Audit Office examined whether the United Kingdom had such a system, and the steps taken to improve animal identification and movement recording following the BSE and beef crisis.

3.38 A system for tracing where animals have been throughout their lives can be of great benefit if an animal disease or other threat to animal health appears. Such a system enables the tracing of animals which have been in contact with diseased animals or have been exposed to the agent which carries disease, and the identification of premises where they have been held. This allows remedial or preventative action to be taken more swiftly and effectively.

3.39 A basic prerequisite of a traceability system is the ability to identify individual animals. This identification is also of benefit in checking claims made in respect of animals under market support schemes, to confirm eligibility and avoid duplicate payments. In 1992, the European Commission Directive 92/102 required cattle to be given a unique identification number, to be recorded on a tag attached to an ear. In addition, farmers were obliged to keep records of those cattle which moved onto and off their holding. This directive was implemented in Great Britain by the Bovine Animals Records, Identification and Movements Order 1995 which updated legislation already in place on cattle identification and farm records. Following the BSE crisis, the Ministry very quickly introduced a second method of establishing cattle movements, shown on an official passport issued for each animal born in or imported into Great Britain from 1 July 1996.

3.40 Tracing animals by using local manual documentation of this kind can be effective in selective routine checking and physical verification at farms of a sample of claims under agricultural support schemes. However, in the event of a crisis where there is a need to trace animals, tracing is difficult, resource intensive and time consuming in the absence of a central computerised database recording all cattle movements. The Department of Agriculture for Northern Ireland has operated a computerised database of cattle since 1988. This system was developed from an existing paper-based animal movement system which was introduced in the early 1970s to deal with bovine tuberculosis and brucellosis eradication programmes. The system records the movements of every bovine animal in Northern Ireland from birth to slaughter as well as full details of each animal's herd number, individual ear tag number, sex, colour, breed, date of birth and complete disease history. As a result of the BSE crisis, the Ministry considered introducing a similar system within Great Britain.

3.41 In July 1990, the Agriculture Select Committee published a report on BSE and issues relating to cattle traceability. This recommended that a comprehensive scheme for identifying and tracing all cattle should be implemented immediately. In the same year, the Milk Marketing Board in England and Wales and the National Cattle Breeders Association commissioned a review of existing systems of cattle identification and recording. This review was published in January 1991 and recommended a cattle data centre incorporating a computerised national database, a unique identification system and traceability for animals. The report received widespread support from the cattle industry. In response to these reports, the Ministry carried out a feasibility study, but did not pursue the issue further in view of the likely costs involved.

3.42 The Agriculture Committee in its First Report of 1994-95 recommended that the Ministry make a new assessment of the probable costs of establishing a national cattle database in the United Kingdom and that the Government and industry should consider the means of funding a central database. It envisaged that, while the Ministry would provide a proportion of the funding, much would come from the industry. In making these recommendations, the Committee acknowledged that while a national database would have advantages, for example, in tracking animals in the event of the outbreak of a disease, its effectiveness would depend on devising a satisfactory means of data collection. It also noted that such systems are expensive to establish and to run and that the benefits were likely to be long term rather than immediate.

3.43 The Government welcomed the Committee's views, proposed some interim steps on existing livestock databases and proposed to consider the timing of a national database feasibility study in 1996-97 following a European Union review in 1996 of arrangements for animal identification.

3.44 Following the March 1996 statement and ensuing crisis, a paper on traceability was published on 11 April 1996 by a firm involved in the milk industry. Subsequently, an industry working group was established which the Ministry were invited to attend. The group's report in August 1996 recommended strongly that the Ministry should establish a cattle database urgently.

3.45 On 29 July 1996, the Ministry engaged PA Consulting to undertake a feasibility study with the specific objective of making recommendations for an efficient and effective cattle traceability system which could be implemented in the shortest possible timescale to support the other measures by the Government designed to lift the export ban. Their report of September 1996 considered two main options:

- implementing a traceability system on the basis of the existing Cattle Passport System, with a view to enhancing it four to five years later; or
- the immediate implementation of an enhanced traceability system.

3.46 PA Consulting recommended that in order to achieve implementation in the shortest possible timescale, the Ministry should adopt the first option which was of lower risk and could be implemented in five to seven months. The set up costs would be approximately £5.5 million, with annual running costs of over £20 million. PA Consulting recommended setting up a British Cattle Movement Service using accommodation and infrastructure provided by the Government, but with the service delivered by the private sector to prescribed standards. This

would involve a shorter procurement time scale and reduced operational risks to Government. The report estimated that the cost of converting the paper passports into an electronic form would grow at about £900,000 for each month of delay. The consultants recommendations and projected timescale were based on the assumptions that there would be a single contract with a private sector provider, a fast track procurement process would be adopted and implementation would start immediately.

3.47 The Ministry submitted a business case to the Treasury in November 1996. Following Treasury approval, the Ministry sought Ministers' approval in December 1996 to consult the industry on proposals for a cattle traceability system in Great Britain. The Ministry consulted widely within the Agricultural Departments and with industry representatives. The responses indicated that to do nothing was not an option as it was inconceivable that the export ban would ever be lifted without such a system. There was, however, some concern about the burden on farmers which would result from the requirement to complete forms for every animal movement. In an effort to address this, the Ministry modified the proposals by placing greater responsibility on agents and markets to notify movements electronically on behalf of farmers. It considered that the use of agents would reduce running costs because fewer movements would be reported by post.

3.48 The Ministry did not consider the seven month time scale proposed by PA Consulting feasible in the light of related European developments, the need to conform to Public Procurement directives, and the need to consult fully and obtain the willing co-operation of the industry. Further delays resulted as Ministerial approval was not obtained before the General Election. Detailed planning work did therefore not begin until May 1997, with the objective of implementing the scheme as soon as possible. The Ministry decided not to contract out the proposed British Cattle Movement Service but to establish it as a distinct operational unit within the Ministry, with the intention of privatising it or turning it into an Executive Agency after it had become fully operational. The Ministry announced on 12 November 1997 that the cost of the cattle tracing system would be recovered through a charge on cattle passports. The charge was expected to be between £5 and £10 per passport. In February 1998, the Government announced that it would meet the costs, of some £35 million for setting up the Cattle Traceability System and of running it in its first full year. The system was expected to be fully operational by late summer 1998.

Conclusion

The National Audit Office concluded that:

- it is clear that the systems in place prior to the BSE crisis for tracing animals for disease control purposes were inadequate to ease the difficulties experienced by the Ministry in identifying and tracing animals for the Selective Cull. Earlier implementation of a computerised traceability system would have enabled the Ministry to act more swiftly and effectively in the event of a crisis; and
- the Ministry is now addressing this through the institution of cattle passports, introduced with effect from July 1996, and the development of a computerised traceability system; it will need to ensure - if the cattle traceability database is to be effective - that the systems for registering cattle are properly operated, that records are kept up to date and that the standard of documentation and cattle identification maintained by farmers is adequate.

Other schemes

3.49 The Over Thirty Month Scheme introduced by the Ministry reflected the ban on sale for human consumption of all over thirty month animals. This ban went beyond the advice of the Spongiform Encephalopathy Advisory Committee that the carcasses of those cattle be deboned and specified bovine offal be kept out of the food chain. The Ministry therefore sought to identify whether there were schemes which could be devised to allow marketing or export of certain animals. The National Audit Office examined the progress made in devising the Beef Assurance Scheme and the Export Certified Herd Scheme.

Beef Assurance Scheme

3.50 Certain extensively reared, specialist beef herds within the United Kingdom mature relatively late and the animals are not therefore sent for slaughter under 30 months. The nature and management of these herds and feeding practices are such that the Ministry considered the risk of BSE to be insignificant. It therefore introduced the Beef Assurance Scheme to allow farmers who specialise in rearing such cattle to market their animals for human consumption until they are 42 months old.

3.51 To be eligible for the scheme, herds must satisfy the following criteria:

- the herd must be a specialist beef herd with no dairy cattle for the previous seven years;
- the herd must have been established for at least four years, except where the herd is sourced from herds already in the scheme;

- there must have been no case of BSE confirmed in the herd (or in animals originating from the herd) and the herd may not include animals from herds in which BSE has been confirmed; and
- animals in the herd must not have received any feed containing meat and bone meal during the previous seven years.

3.52 The Ministry consulted the Spongiform Encephalopathy Advisory Committee who were content that these rules would ensure that the risk of BSE in such herds was extremely low and that the scheme offered alternative assurance to that provided by the general thirty month age restriction. The Ministry also discussed the proposed rules with the European Commission and presented them to the Standing Veterinary Committee prior to the introduction of the scheme on 1 September 1996. The statutory instrument which forms the legal basis of the scheme sets out the conditions of eligibility (Statutory Instrument 1996 number 2097).

3.53 The administration costs of the scheme are recovered by charges to participating farmers. For the first year of operation, to 1 September 1997, these consisted of a registration charge for the herd of £35 and a charge of £3.35 per animal. Both are payable annually. Farmers are also required to double tag each animal with its official ear number. The charges are designed to recover the Ministry's costs of administering the scheme, including inspecting herds twice a year to ensure compliance with the scheme rules. In addition, inspectors make two visits a year to each herd to ensure the integrity of records held by the Ministry.

3.54 As at December 1997, some 940 applications for registration had been received. However, many of these were found to be ineligible. Of the 203 applications which passed initial checks, only 77 chose to register, covering 4187 animals. The cost of the scheme in 1996-97 was £1 million, the bulk of which were start-up costs, and is expected to be considerably lower in 1997-98.

Export Certified Herd Scheme

3.55 The Ministry has also drawn up proposals for an Export Certified Herd Scheme. The aim of the scheme would be to secure the lifting of the export ban for meat and meat products from herds which have had no association with BSE for eight years. Such herds would be required to meet a number of criteria similar to those set for the Beef Assurance scheme.

3.56 Proposals for such a scheme were drawn up in 1996 and submitted to the European Commission in February 1997. However, the Commission's Scientific Veterinary Committee issued an unfavourable opinion on the proposals on 11 June 1997. In the light of the Committee's concerns, a revised proposal containing a variety of changes was submitted to the European Commission on 25 July 1997. The Committee issued a favourable response on 11 September.

3.57 In the light of the Committee's opinions and subsequent discussions with the Commission, agreement was reached that the scheme would be based on computerised traceability and hence would be of initial benefit only to Northern Ireland. The Commission visited Northern Ireland in early November 1997 to examine the practical aspects of implementation of the scheme. The Commission presented the proposal on the scheme to the Standing Veterinary Committee who referred the proposal to the Agriculture Council. The Council adopted the proposal on 16 March 1998. In May 1998 the Commission fixed a date of 1 June for exports from Northern Ireland to restart.

Date-based Export Scheme

3.58 In addition, on 2 October 1997 the Ministry submitted a proposal to the Commission for a date-based export scheme which would apply throughout the United Kingdom. The scheme would allow the export of meat and meat products from cattle born after 1 August 1996 which were aged over six months and not over 30 months. The proposal is on the basis that, as a result of strengthened controls over feed stuffs, these animals could not have been exposed to mammalian meat and bone meal. In order to address the possible risk of infection for animals born after 1 August 1996 from maternal transmission, the scheme includes plans for the compulsory slaughter of all offspring born to BSE infected cows on or after that date.

3.59 The proposal was considered by the Commission's Scientific Steering Committee which gave its opinion on the proposals on 9 December 1997. That opinion did not challenge the scientific basis for the proposals but suggested that the Commission would need to be satisfied as to the adequacy of provisions for identification and checking of animals and for post-slaughter separation of meat for export. As at the end of December 1997, Ministry officials were discussing the way forward with the Commission. The Steering Committee gave a second opinion in February 1998 in favour of the amended proposal for the Date-based Export Scheme. The Commission adopted a formal proposal on 10 June 1998.

Conclusion

The National Audit Office concluded:

- while the Ministry's efforts have been targeted at implementing the major schemes to remove cattle from the food chain and support the market, it has also sought to develop interim measures allowing the marketing of cattle from herds not at risk from BSE and establishing the basis for lifting the export ban.
-

Part 4: Administrative and other issues

Introduction

4.1 In reviewing the operation of the schemes introduced in response to the beef crisis, the National Audit Office noted some aspects where significant problems were yet to be solved, had a long term impact, were relevant to more than one of the schemes examined or were matters of general interest.

4.2 This part of the report deals with:

- the problems facing the Ministry and the Intervention Board in incinerating and disposing of the meat and bone meal now in store;
- the difficulties in obtaining refunds under schemes part-funded by the European Union;
- in view of the above, the exit strategy for the Over Thirty Month Scheme;
- the work carried out by the Board to investigate allegations of fraud or irregularity; and
- the impact of the crisis on staff numbers and administrative costs at the Ministry and Intervention Board.

Incineration and disposal

4.3 The National Audit Office examined:

- the sources and quantity of material awaiting destruction and the method of disposal;
- the incineration capacity required, the speed with which this is being obtained and the likely cost.

Disposal of rendered products

4.4 Stocks of meat and bone meal and tallow held by the Intervention Board awaiting disposal arose from a number of sources:

- the entire carcasses of over thirty month animals, including Specified Bovine Material and, since January 1997, blood;
- the entire carcasses of Selective Cull animals, including Specified Bovine Material and blood;
- Specified Bovine Material from bovine animals under thirty months which have been slaughtered for human consumption;
- Specified Risk Material from sheep and goats.

4.5 As at 31 March 1997, there were 186,000 tonnes of meat and bone meal stored in 12 warehouses at 9 locations in England, Scotland, and Northern Ireland, and 100,000 tonnes of tallow in two locations, Liverpool and Canvey Island. In addition at that date, there were some 169,000 carcasses held in cold store awaiting rendering. By September 1997, total meat and bone meal in store had risen to 257,000 tonnes. Most of this material results from the operation of the Over Thirty Month Scheme, as the quantities of rendered material from other sources are relatively small. Stocks of carcasses in cold storage were eliminated by November 1997 as sufficient capacity became available to render frozen carcasses. The costs of storage and transport of meat and bone meal, tallow and frozen carcasses were £80 million as at the end of September 1997. Of this, £7 million related to the cost of storage of meat and bone meal. Figure 23 shows the location of stores of meat and bone meal as at December 1997

Location of meat and bone meal stores

Figure 23



4.6 Prior to the March 1996 crisis, meat and bone meal from Specified Bovine Material had generally been going to landfill. In May 1996, the Spongiform Encephalopathy Advisory Committee advised that landfill continued to be an acceptable method of disposal for meat and bone meal of any origin, including rendered material from the Over Thirty Month scheme; and that incineration was not justified on scientific grounds. However, the European Union regulation for the Over Thirty Month Scheme refers to the destruction of animals, and the European authorities interpret this as requiring the incineration of animals entered into the scheme. The European Commission's agreement would be needed if meat and bone meal from the Over Thirty Month Scheme were to be landfilled, but no decision has been taken to make such an approach.

4.7 The National Audit Office also found that:

- in Great Britain, Specified Bovine Material from under thirty month cattle and Specified Risk Material from sheep, though not Selective Cull material, had been rendered together with Over Thirty Month material. Specified Material from under thirty month cattle and sheep constituted roughly 15 per cent of the total meat and bone meal in store. The Intervention Board, rather than producers and the meat industry, in practice paid for the storage and disposal of material not from the Over Thirty Month Scheme although there was no legal obligation for them to do so. This situation arose because the Board had to use all the rendering capacity that was available in order to clear the backlog of cattle awaiting slaughter during 1996. The available capacity would have been reduced had the Board required that the under thirty month material be separately processed.
- by contrast, in Northern Ireland, as part of the agreement with renderers effective from February 1997, Specified Bovine Material from under thirty month animals and specified risk material from sheep was rendered separately to Over Thirty Month Scheme material and was being landfilled after rendering. The renderers pay for the storage and disposal of this material. Such an option offered very substantial savings as the costs of landfilling were approximately £50 per tonne, compared to £210 per tonne for incineration. As at November 1997, the Intervention Board intended to conclude a similar agreement with renderers in Great Britain.
- under the terms of waste management regulations, store operators are obliged to obtain a licence from the Environment Agency for each store used. However, an exemption from this requirement was provided for in legislation, allowing operators to store up to 60,000 tonnes at any site for up to 12 months if, as the Board assumed, the material was to be incinerated. All stores had made use of this exemption and the Board initially expected the material to be incinerated at a plant with provision for energy recovery within that time. This proved not to be the case. Therefore since April 1997 the Board has introduced procedures for licensing each store. In the case of new stores to be used for this material, the operator is required to apply for a waste management licence within six months of taking material into store.

Incineration capacity

4.8 The National Audit Office found that as at the end of September 1997:

- forecasts by the Ministry and the Intervention Board assumed that some 750,000 animals would enter the Over Thirty Month Scheme each year. In addition, approximately 100,000 tonnes of Specified Bovine Material from animals not covered by the scheme and Specified Risk Material from sheep would also require rendering and incineration;
- carcass incineration capacity was only sufficient to process up to 100,000 cattle a year. This was provided for in twelve contracts with operators of cattle incinerators and was almost entirely dedicated to on-farm casualties;
- meat and bone meal incineration capacity was only sufficient to process between 15,000 and 20,000 tonnes a year. This consisted of a contract with a high temperature incineration company, Rechem, following an exercise by the Department of Trade and Industry to identify the availability of such capacity. The contract was placed by the Board in January 1997 and runs for three years;
- as shown by Figure 24, the volume of meat and bone meal was likely to increase by more than 100,000 tonnes a year.

Estimated annual increase
in meat and bone meal

Figure 24

	Number of Animals	Equivalent weight (tonnes)	
		Raw Material	Meat and Bone Meal
Cattle entering scheme	750,000	375,000	
Other Specified Material		100,000	
Less: Direct carcass incineration	(100,000)	(50,000)	
Total		425,000	105,000
Less: Meat and bone meal incineration capacity			15,000
Increase in meat and bone meal awaiting incineration			90,000

Notes: 1. Weight of cattle estimated on the basis of an average weight per animal of 0.5 tonnes.
2. Weight of meat and bone meal estimated on the basis of a yield ratio of 25 per cent.

The estimated increase in meat and bone meal as at September 1997 was 90,000 tonnes a year

4.9 In order to address the requirement for increased incineration capacity the Board issued tenders in two phases. The first was initiated in June 1996 with the objective of identifying additional incineration capacity which could be realised in the short or medium term. Letters of intent were issued by the Board to nine companies who had offered sufficient capacity to burn 13,000 carcasses a week. Little of this capacity came on stream quickly, however, because of difficulties found by tenderers in obtaining planning permissions and the separate need to obtain environmental authorisations. Nevertheless, with risk assessment work published by the Environment Agency on 26 June 1997 which dealt with risks associated with various aspects of dealing with Over Thirty Month materials including those associated with incineration, there has been some progress. The Board expected to obtain additional capacity from the first tender exercise, subject to planning and environmental consents, to process a further 2,000 to 3,000 carcasses a week by April 1998.

4.10 A second tender was initiated by the Board in January 1997 with a closing date of 8 April 1997. The aim was to identify firms who could provide additional slaughter, rendering, incineration and disposal services. Preference would be given to those who could slaughter and dispose of the animals by direct incineration or by rendering followed by incineration of the resultant meat and bone meal and tallow, as an integrated operation. Tenders were still being analysed in July 1997. Initial results indicated that the tenders in theory could yield sufficient incineration capacity to directly incinerate all cattle newly joining the scheme by spring 1999. However, most of the proposed facilities did not then exist and the Board's experience suggested that not all this capacity might be realised, due to delays in operators receiving operating consents, and commercial decisions to withdraw. Moreover, the unit cost of direct incineration substantially exceeded that of rendering and incineration of the resultant meat and bone meal and tallow. The Board therefore suspended the incineration part of the tender in summer 1997 to allow comparison with new options, in particular those relating to the large scale incineration of meat and bone meal.

4.11 Rendered material in store is therefore likely to increase to just over 300,000 tonnes of meat and bone meal and 170,000 tonnes of tallow by spring 1998. Thereafter, taking into account the expected increase in carcass incineration capacity and the elimination of non-scheme material for rendering, meat and bone meal will continue to increase by approximately 65,000 tonnes a year compared to the estimates of 90,000 tonnes as at September 1997 (Figure 24). The Board is therefore examining options for its destruction, such as contracts with power generation companies or building of new incineration capacity. These options will be subject to policy decisions by Ministers.

4.12 The Board and the Department of Trade and Industry invested much effort during 1996 in negotiations with three major power generation companies about the possibility of burning meat and bone meal in coal-fired power stations. The companies have not tendered but have indicated that they are each prepared to burn 75,000 tonnes of meat and bone meal a year and a related amount of tallow up to the end of the year 2000. Small scale trials have been conducted, with the three companies incurring development costs of about £700,000 which the Board is expected to reimburse. These trials showed that the burning of meat and bone meal and tallow in power stations is technically feasible. However, there are a number of difficulties:

- meat and bone meal would have to be rendered to a tight specification and this would give rise to greater costs in monitoring and regulating rendering plants. Existing meat and bone meal would need additional processing before it could be submitted to the power generators;
- the need to obtain planning permissions, almost certainly involving public inquiries at each site, may delay the commencement of processing, probably until 1999. An adverse decision could also throw the whole project into jeopardy as none of the power generating companies is willing to enter a contract with the Board on its own;
- the introduction of tight emission regulations at the end of 2000 will present a further constraint, as none of the companies is prepared to enter into any commitments beyond that point. In practice, therefore, the available time period for them to process the meat and bone meal might be as little as two years or even less;
- the companies' proposals would require substantial expenditure including capital costs of some £18 million, as well as unknown decommissioning costs and the costs of reprocessing the existing meat and bone meal; and
- the power generating companies require a comprehensive indemnity from the Government against any claims arising from the incineration of meat and bone meal. No such indemnity has been granted to any other organisations involved in handling Over Thirty Month or Specified Bovine Material.

4.13 Other options for disposing of meat and bone meal include the commissioning of additional high temperature incineration capacity and the provision of incineration facilities at rendering plants. These possibilities, which were being explored as a matter of urgency in 1997, offer the prospect of eliminating the stocks of meat and bone meal, though timing is as yet uncertain. The indications are that stocks of tallow have a positive value when used in place of heavy fuel oil. The intention, therefore, is to sell them by tender to the extent that they are not required to facilitate the incineration of meat and bone meal.

Conclusion

The National Audit Office concluded that:

- the disposal of stocks of 257,000 tonnes of meat and bone meal existing at September 1997 by landfilling would cost £14 million. Although scientific advice suggests this disposal method is safe, relative to other methods, it does not meet the requirements as currently interpreted by the European Commission. In any event, there is the important question of the public acceptability of landfill of such material;
 - unless the Commission changes its interpretation, it will be necessary, in the interests of safeguarding European Union funding, to incinerate this material. High temperature incineration at a likely cost of £70 million would be a heavy burden for the United Kingdom taxpayer. The Board is therefore right to explore other, less costly, incineration routes;
 - approximately £7.5 million of this estimated cost relates to meat and bone meal from under 30 month animals and from sheep and goats. There was no legal obligation on the Board to pay for the storage and disposal of this material, but it accepted responsibility for it in order to maximise rendering capacity available for the Over Thirty Month Scheme in 1996;
 - in view of the high cost of storage, the Board was right to seek further incineration capacity via competitive tenders; but the results have proved somewhat disappointing as new environmental requirements have made direct carcass incineration unattractive in terms of unit cost and prospects of delivery. The Board has therefore suspended this part of the tender while other options are considered;
 - in exploring the future options for disposal of carcasses or meat and bone meal, the Board must ensure it has sufficient information on the costs of those options as the basis for comparison and where competition is not available, should adopt appropriate measures for the review of costs claimed by contractors; and
 - it is possible that current stocks will not be eradicated until 2003.
-

European Union reimbursements

4.14 Several of the schemes reviewed earlier in this report are partly or fully financed by the European Union. In those cases, the United Kingdom are able to claim reimbursement of amounts paid, subject to compliance with the European regulations applicable to the relevant scheme. For the schemes examined in this report, the National Audit Office:

- compared the amount of funds reimbursed by the European Union with that eligible for reimbursement; and
- where this comparison suggested major difficulty or delay, analysed the reasons.

Comparison of amounts reimbursed

4.15 Figure 25 shows the schemes which are fully or partly funded by the European Union, the amounts paid by the United Kingdom in 1996-97 and the amount reimbursed by the Union up to 30 September 1997.

Expenditure in 1996-97 and European Union reimbursements

Figure 25

	United Kingdom expenditure eligible for EU funding (1996-97) £m	European Union reimbursements (to 30/9/97) £m
European Union and United Kingdom co-funded schemes		
Over 30 Month Scheme - compensation payments to farmers	370	236
Calf Processing Aid	51	51
Selective Cull	0	0
Beef Marketing Payments	29	29
Beef Special and Suckler Cow Premium Top Ups	120	120
Intervention	170	102
Repurchase of ex-Intervention Beef	2	0
Total	742	538

Some 70 per cent of expenditure in 1996-97 eligible for reimbursement by the European Union had been received by the end of September 1997.

Some 70 per cent of expenditure in 1996-97 eligible for reimbursement by the European Union had been received by the end of September 1997.

4.16 In the case of intervention stocks, expenditure reflects the purchase price paid and the ancillary costs of transport, handling and storage. However, reimbursement is based on the immediate depreciation in value when the stocks are frozen together with a contribution towards financing and the ancillary costs. Later, when stocks are sold, the European Union reimburses any losses, or recovers any profits, against the book value of the stock. The Intervention Board confirmed that all amounts reclaimable for the financial year 1996-97 had been received by 30 September 1997.

European Union reimbursements on the Over Thirty Month scheme

4.17 The European regulation on which the Over Thirty Month Scheme is based set out a number of conditions for reimbursement from European Union funds:

- reimbursement would only be paid on the costs of purchasing animals into the scheme, not on any other aspect;
- the compensation to farmers and European Union reimbursement was set at 1 ECU per kilogram, though it was subsequently reduced in two stages to 0.8 ECUs per kilogram;
- only 70 per cent of the purchase price would initially be reimbursed. In view of the large numbers of animals concerned and in the interests of simplification, the European Union and the United Kingdom agreed that this 70 per cent would amount to a flat rate of 392 ECUs per animal. This was calculated on the basis of the initial compensation rate and an estimated average weight of 560 kilograms for a cull cow; and
- reimbursement was dependent on the destruction of each animal. The European authorities subsequently confirmed that should be interpreted as incineration of all animal material after slaughter and rendering.

4.18 The requirement for incineration created considerable difficulty, due to the lack of sufficient incineration capacity in the United Kingdom. In October 1996 the Ministry therefore negotiated with the European authorities an agreement whereby 80 per cent of the Community contribution would be paid after the animal concerned had been rendered. Under European Commission regulation 1846/96, the balance could be claimed after incineration.

4.19 In November 1996, the Intervention Board submitted a claim to the European Commission for reimbursement relating to animals rendered in the period ended 15 October - the end of the European Commission accounting year. Thereafter, the Board has submitted monthly claims for reimbursement. By 30 September 1997, reimbursement amounting to some £236 million has been received in respect of expenditure incurred in 1996-97, relating to some 925,500 animals.

4.20 The National Audit Office noted that:

- the claims were drawn up manually due to the absence of a computerised payments system which would have included details of every animal on which compensation was paid (paragraph 2.59);
- the claims were based on the number of animals slaughtered, with adjustments for animals not eligible for compensation and for carcasses put into or taken from cold storage;
- although the Board had put in place a system of controls to ensure that all animal material transferred between different stages of the process was accounted for, there remained substantial difficulties in calculating the number of carcasses rendered. In particular, the transfer of material to renderers was measured by weight rather than the number of animals; while further difficulties arose from the separation of different kinds of material from individual animals in order to improve the efficiency of rendering; and
- the Intervention Board used various sources of data to address these problems and, where there were discrepancies, it adopted the most conservative figures on which to base the claim, using only those figures which could be fully substantiated. As a result, claims to date to the European Commission for reimbursement may have been significantly lower than might have been justified.

Conclusion

The National Audit Office concluded that:

- because of practical difficulties in reconciling the quantity of rendered material with numbers of animals slaughtered, the Board has been unable to substantiate the number of carcasses involved on which to base claims for payment. The United Kingdom taxpayer has been disadvantaged to the extent that the European Union reimbursements of significant amounts due to the United Kingdom have been claimed and paid later than they should have been; and
 - while the Board expects further development of its payments systems will provide a sound basis for further claims, the final 20 per cent reimbursement from the European Union will not become available until the stocks of meat and bone meal are incinerated.
-

Exit strategy

4.21 Most future expenditure will be on the Over Thirty Month Scheme. At the time of the National Audit Office's study, the Ministry had not made proposals to the European Union to limit access to the scheme or to scale down and end it over a defined period. This was because the Ministry judged that any mention of an exit strategy could have adversely affected the operation of the scheme at a crucial period when it was trying to reduce the backlog and negotiate new contracts with abattoirs and renderers. Nor did the European Union at the start of the Scheme specify the conditions which would lead to its eventual closure.

4.22 The National Audit Office looked at the scope for an exit strategy, in view of the size and ongoing nature of the expenditure. The Ministry calculates that there are some 4.25 million animals born before 1 August 1996 which will not have reached the end of their useful lives by February 1999 and will not have been entered into the scheme. The purchase cost of this number of animals, excluding the costs of slaughter, rendering and disposal, is some £1.3 billion. Various strategies for limiting or ending the scheme are possible in theory but any strategy would need to be developed in the light of the position reached in lifting the export ban and the impact on producer prices. Possible options include:

- gradually reducing the value of support payments to farmers, as has happened since the outset of the scheme;
- setting a cut-off date, such that animals born after that date would not generate any compensation on slaughter. Such a date should not be earlier than the ban on holding illegal feed which the Ministry imposed from 1 July 1996; and

- closing the scheme only when the ban on European exports of British beef is lifted, or when the Ministry decides to lift the ban within the United Kingdom on the sale of over thirty month meat for human consumption.

4.23 The most important factor for the Ministry is the future of the over thirty month rule, which will depend primarily upon human health considerations rather than the desire to reduce expenditure. Any proposals to end or limit the scheme would first need to be endorsed by the Spongiform Encephalopathy Advisory Committee and approved by the European Union before implementation. In particular, lifting the ban on the sale for human consumption of over thirty month meat could only be contemplated if a number of preconditions were met, including a low incidence of BSE in cattle and low risk of infection; no further evidence of infectivity in tissues not included in current Specified Bovine Material controls; evidence that BSE is no longer occurring in younger cattle; and the incidence of new variant Creutzfeldt-Jakob Disease in humans remaining low.

Conclusion

The National Audit Office concluded that:

- in view of the high and continuing cost of the Over Thirty Month Scheme and for the purposes of planning and of assisting farmers in their decision making, the scope for an exit strategy for this Scheme with proposals for bringing it to an end, is worthy of consideration; and
- the Ministry is not free to determine the nature or timing of such a strategy. Any changes to the Scheme must be approved by the European Union to meet its requirements for reimbursement of expenditure and the conditions for lifting the export ban. In addition, the implications for the industry of such changes and scientific advice on the protection of public health are also determining factors.

Special investigations

4.24 As several of the schemes examined were implemented to meet urgent demands and new payment systems were introduced, the National Audit Office reviewed the action taken by the Ministry and the Board to carry out special investigations into allegations of irregularity or impropriety.

4.25 The Intervention Board conducts verification visits to claimants to confirm that schemes are operating in accordance with the relevant rules and regulations. Initially, these visits covered transactions in the European Commission financial year to 15 October 1996 and involved detailed examination of claim records and trustee accounts at every collection centre in the United Kingdom. Approximately 130 visits were scheduled from May 1997 until September 1997 but the analysis of the results was not expected to be complete until later in the year.

4.26 Any allegations of impropriety are investigated by a special anti-fraud unit within the Intervention Board. Since April 1996, this unit has registered 95 cases relating to BSE schemes operated by the Board in response to allegations reported to them from a variety of sources. Analysis of the files by the National Audit Office in August 1997 showed that:

- of the 95 cases registered, in 14 cases primary responsibility for pursuing investigations lay with other bodies, including the Department for Agriculture, Northern Ireland; the Scottish Office; Trading Standards; and the police;
- 67 cases related to the Over Thirty Month Scheme, while 19 related to Calf Processing and 9 to the Beef Stocks Transfer Scheme;
- 27 cases had been, or were about to be, closed. These were mainly cases where there was insufficient evidence, or no evidence at all, to substantiate the allegation. They also included minor cases where there was no evidence of deliberate intent and which had been dealt with by the issue of warning letters;
- a further 24 similar cases where enquiries were continuing, but there was likely to be difficulty in finding reliable evidence to substantiate the allegations;
- no case had gone to trial, but there were several which were being referred for legal advice and which could result in prosecutions.

4.27 Most allegations were of ineligible animals being entered into the scheme. Many allegations involved the falsification of documents to show, for example, that the animals met age requirements. While many of the cases related to a small number of animals or claims, in a few cases there appeared to be evidence of systematic deception on a wider scale, particularly under the Calf Processing Aid Scheme. The Board's Anti-Fraud Unit had not attempted to quantify the likely financial amount involved in each allegation, though in some cases this would not have been possible until investigations were completed.

Conclusion

The National Audit Office concluded that:

- the Ministry and the Intervention Board have taken appropriate steps to investigate allegations of irregularity and to liaise with other bodies with primary responsibility for investigations; and
- they should also seek to quantify the amount at risk and, particularly for those schemes which are still in operation, should publicise the severity of the action taken when wrong doing is discovered.

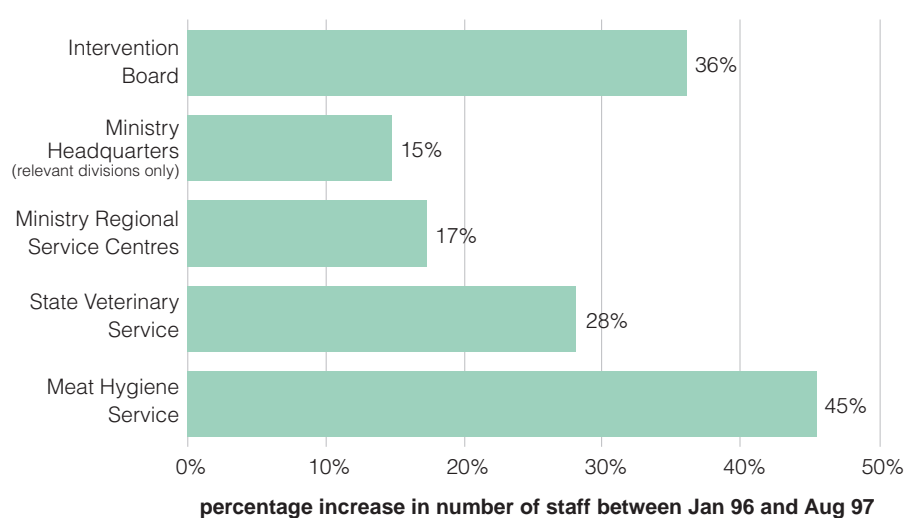
Impact of the BSE crisis on staffing

4.28 In response to the BSE crisis, both the Ministry and the Intervention Board allocated or recruited additional staff to cope with the increased workload (Figure 26):

- staff numbers at the Intervention Board increased by 36 per cent from 917 staff in March 1996 to 1248 staff in September 1997. In this period, the number of casual staff increased from 85 to 256; and
- staff numbers in relevant divisions within the Ministry and its other agencies increased by 15 per cent from 4,300 to over 4,940. Most of this increase occurred in the Meat Hygiene Service, the State Veterinary Service and the Ministry’s Regional Service Centres.

Increase in staffing as a result of the BSE crisis

Figure 26



Source: National Audit Office analysis of Ministry and Intervention Board papers

Note: Intervention Board figures are from March 1996 to June 1997

Increases in staffing at the Intervention Board, the Ministry and its agencies as a result of the BSE crisis ranged from 15 to 45 per cent

4.29 The additional staff required fell into two main categories:

- general administration arising from the introduction of new schemes; and
- technical work involved in implementation or checking of physical controls. This work is not covered in detail by this report.

4.30 In the case of general administrative staff, these were recruited mostly through job centres and employment agencies on temporary appointments and short term contracts. Such staff were largely given on the job training.

4.31 The pressure of work on the Intervention Board, in particular, is demonstrated by the number of telephone calls and letters it has received. In order to deal with these, the Board set up a telephone helpline with staff recruited to respond to queries from farmers, abattoirs, and many other sources. There were some criticisms of the effectiveness of the helpline from organisations which the National Audit Office consulted. Dissatisfaction generally reflected the use of temporary staff who had little knowledge of agriculture or the schemes themselves. However, the Intervention Board was under immense pressure due to the number of queries received during a period of crisis when specific schemes and other measures were being developed. In May 1996, for example, the Board's BSE Schemes Helpline handled some 17,500 telephone calls.

4.32 The crisis has also resulted in significant administrative costs for the Ministry, the Intervention Board and the Scottish, Welsh and Northern Ireland Offices. This was largely as a result of expenditure on staffing. The following figure (Figure 27) shows that the administrative costs amount to over £70 million a year, and are expected to remain at this level for several years.

Administrative costs of the BSE crisis

Figure 27

	1996-97 £ m	1997-98 £m
Ministry of Agriculture		
■ Departmental costs	5.4	9.0
■ Payments to the Meat Hygiene Service and Veterinary Laboratories Agency	19.0	21.0
■ Expenditure on research, valuers' fees, and publicity	27.8	25.3
Intervention Board	19.0	21.6
The Welsh Office	1.0	
The Scottish Office	2.0	2.0
The Northern Ireland Office	2.0	2.0
Total	76.2	80.9

Administrative costs of the BSE crisis in agriculture departments are over £70 million a year

4.33 The Ministry and the Board sought to supplement staff resources and expertise by employing consultants. For example, they employed Coopers and Lybrand to report on the impact of the crisis on the slaughtering, rendering and downstream elements of the industry, to verify rendering industry support payments for 1996-97 and to conduct reviews of the costs of slaughter and rendering under the over Thirty Month Scheme; PA Consulting to make recommendations on a cattle traceability system; and the supply trade organisation UKASTA to co-ordinate work under the Animal Feed Recall Scheme.

Conclusion

The National Audit Office concluded that:

- with the size of the crisis and pressure to make early progress, it is not surprising that significant extra staff have been required; at the same time, the speed at which extra staff were recruited, and the need to train them, may have impacted on the efficiency and effectiveness of administration in the initial stages of design and implementation of new schemes; and
- the Ministry and Intervention Board will need to ensure that staffing in the future is adjusted to match levels of activity.

Glossary

Bulls	Male animals maintained for breeding.
Carcass	Dead body of an animal, at later stages with certain elements removed.
Casualty animal	An animal injured whilst on farm requiring immediate slaughter.
Cattle passports	Identification documents required for all bovine animals born in or imported into Great Britain from 1 July 1996.
Cohorts	A group of animals born in the same season.
Cull cow	A dairy cow which has reached the end of its economically productive life and which cannot be sold for human consumption as it is over thirty months of age.
Dairy cow	Female cattle bred and maintained for milk production.
Deadweight	see killing out ratio/deadweight coefficient.
Disfiguring and staining	Regulations require the destruction of all Specified Risk Material and Over Thirty Month Scheme material from slaughtered animals. The material is stained as an additional control to prevent any possible use for human consumption or other commercial purposes.
Epidemiology	The study of how diseases are transmitted. Scientists at the Ministry's Veterinary Laboratory Agency are responsible for monitoring BSE and predicting its likely incidence.
Green rate	A special exchange rate used by the European Commission to convert the European Currency Unit (ECU) into the currency of a member state for agricultural purposes. The green pound is the UK conversion rate.
Headage payments	Payments based on the number of animals in a herd.
Heifers	Young female cattle bred to produce beef for human consumption and normally slaughtered by the age of 20 months.

Intervention	The purchase of agricultural produce by the European Commission in order to maintain prices.
Killing out ratio/ Deadweight coefficient	Compensation payments are paid on the basis of the weight of the live animal (the liveweight). However, because most abattoirs do not have the means to weigh the live animal the animal is weighed after slaughter (the deadweight). Because the deadweight is lower than the liveweight, a killing out ratio or deadweight coefficient is applied to give the equivalent liveweight and the payment due.
Liveweight	See killing out ratio/deadweight coefficient
Meat and bone meal	See rendering . Meat and bone meal from cattle and other mammals was used in cattle feed until it was linked with BSE in cattle and banned in 1988.
Rendering	The process of boiling down the inedible remains of cattle and other animals to produce a dry powder called meat and bone meal and an oil called tallow . Since the start of the BSE crisis, all meat from Over Thirty Month animals is also rendered.
Specified Bovine Material	The term now used to describe all material from cattle carcasses which is removed and destroyed to avoid the risk of passing BSE on to humans. Following new regulations, this material is now also removed from sheep and goat carcasses and is termed specified risk material .
Specified Bovine Offal	A term formerly used to describe proscribed material from cattle carcasses which had to be removed and destroyed after slaughter. As the definition has widened to include the head and spinal cord of animals, this term has been replaced with specified bovine material .
Specified Risk Material	See specified bovine material .
Steers	Young male cattle bred to produce beef for human consumption and normally killed before the age of 20 months.
Suckler cows	Female cattle maintained for breeding purposes
Tallow	An oil produced from rendering which has a variety of uses from fuel to soap and cosmetics.

Appendix 1

The history of BSE and its nature

The history

1 Bovine Spongiform Encephalopathy (BSE) was first identified by the Ministry in late 1986. Early research findings at the Institute for Animal Health confirmed that BSE was a newly identified member of an already known group of transmissible diseases occurring in other animals and in man. Cases have since occurred in native born cattle in other countries but the incidence in the United Kingdom is significantly higher than elsewhere. Detailed scientific studies began in 1987 to obtain better information on the nature of BSE and its origin and causes.

2 Early epidemiological research indicated that confirmed cases of BSE had appeared simultaneously throughout the United Kingdom but that the incidence of the disease reflected regional variations. Scientists thought that the most likely vehicle of infection was cattle feed containing meat and bone meal made from sheep infected with scrapie, a spongiform encephalopathy endemic in sheep. Exposure of cattle to BSE was likely to have started in the late 1970s and early 1980s following changes in certain rendering practices.

3 As a result of these initial studies legislation was introduced in mid-1988:

- making notification of suspected cases of BSE compulsory; and
- banning the feeding of ruminant derived protein to ruminants.

4 Detailed monitoring of the epidemic has allowed the effects of the feed ban introduced in 1988 to be observed and research into the incidence of BSE to be carried out. By 29 May 1998 BSE had been confirmed in 171,598 cases in Great Britain. The epidemic reached a peak in 1992: BSE was confirmed in 36,682 animals placed under restriction in that year. The number of cases of BSE has fallen to 8,016 cases confirmed in animals placed under restriction in 1996 and 4,296 cases confirmed to date in animals placed under restriction in 1997. Independent forecasts suggest that the disease may be close to extinction in the United Kingdom by the year 2001.

Summary of actions between 1986 and 1996

- 1986: Existence of disease identified by the Ministry's Central Veterinary Laboratory.
- 1987: Epidemiological and transmission studies started. Initial conclusions that meat and bone meal derived from ruminants was the only viable hypothesis for cause of BSE.
- 1988: Surveys of feeding histories of affected animals, and of rendering practices. Study of geographic occurrence of BSE. Southwood Working Party announced to advise on the implications of BSE. Sale, supply and use of certain feeding stuff to ruminants banned. Southwood welcomed feed ban; advised that cattle suspected of having BSE be destroyed. Slaughter policy for suspected cases announced and into effect 8 August (Great Britain), 28 November (Northern Ireland).
- 1989: Southwood report published and Government response accepting recommendations announced, including setting up the Tyrrell Committee to advise on research priorities. Ban on use of certain bovine offals for human consumption in England and Wales.
- 1990: Tyrrell Committee report and Government response that all top and medium priority research work was underway or soon to be started. Bovine offal ban introduced in Scotland and Northern Ireland. Spongiform Encephalopathy Advisory Committee (SEAC) established, replacing Tyrrell Committee. Disease made notifiable to European Commission. Bovine offals ban extended to all animal feed, on advice of Tyrrell Committee. International meetings and conference held, e.g. on trade, control and surveillance of BSE. European Union placed restrictions on certain elements of UK beef trade. Agriculture Committee report and Government response published.
- 1991: First case announced of BSE in cattle born after feed ban. Export ban on offals extended. Existing BSE legislation consolidated and extended to cover use of certain meat and bone meal as fertiliser.
- 1992: SEAC considered latest BSE research, concluded that measures then in place provided adequate safeguards for human and animal health. Various progress reports submitted for example to House of Commons Library.
- 1993: Further progress reports submitted.
- 1994: Changes to compensation for confirmed cases of BSE. Further progress reports. European Commission decisions on feeding of mammalian protein to ruminants; heat treatment systems for processing animal waste; exports of bone-in beef. Bans on use of specified bovine offals in human food and animal feed extended.
- 1995: SEAC published "Transmissible Spongiform Encephalopathies - a summary of present knowledge and research". Controls extended in response to research indicating some failures in compliance in 1988 with the feed ban and in response to advice from SEAC.
-

5 Between 1986, when the disease was first identified, and 1996 a number of actions were taken in the light of emerging information on the incidence of BSE, its likely causes and on measures necessary to eradicate it and to protect the public from risk of exposure to BSE.

Role of the Spongiform Encephalopathy Advisory Committee

6 The Spongiform Encephalopathy Advisory Committee was constituted in April 1990, replacing earlier committees, to provide independent advice to the Ministry of Agriculture, Fisheries and Food and the Department of Health. Membership of the Committee and its subgroups has been expanded since 1990 to bring in additional expertise to deal with emerging issues. The Committee's expertise covers a wide range of veterinary and medical sciences. The Committee reviews all matters concerned with Transmissible Spongiform Encephalopathies including the number of cases of BSE and similar diseases occurring, research findings and other relevant issues; advises the Government on the potential implications; and recommends action that should be taken.

Events in 1996

7 The epidemic of BSE had led to heightened surveillance in the United Kingdom of Creutzfeldt-Jakob Disease (CJD), a transmissible spongiform encephalopathy disease of man, from May 1990 to identify whether there were any changes in the occurrence of CJD which might indicate an association with BSE. This work is carried out by the National CJD Surveillance Unit at the Western General Hospital in Edinburgh, to whom cases of suspected CJD of all types are referred for investigation.

8 CJD occurs in man throughout the world at low levels of incidence but by early 1996, the Surveillance Unit had identified 10 out of 207 cases since 1990 with features which distinguished them from other cases, such as the age of the victims, slower disease progression and characteristic brain lesions shown on microscopic examination. These 10 cases had come to the Unit's attention between March 1995 and March 1996. The Unit's findings suggested that these 10 cases (now 24) represented a new variant of CJD which might be unique to the United Kingdom. This raised the possibility that the cases might be linked to BSE. Research findings from the Institute for Animal Health and Imperial College London published in October 1997 provide the strongest confirmatory evidence that the agent which carries BSE is the same as that which causes new variant CJD. These findings do not identify the route of infection but did not affect the view that the most likely explanation of the cases of new variant CJD is exposure, prior to the specified offal ban in 1989, to food containing beef products carrying the Bovine Spongiform Encephalopathy agent. Scientists believe that it is likely to be several years before accurate predictions on the possible future number of cases of new variant CJD can be made.

9 The evidence about the new variant of CJD was presented to the Spongiform Encephalopathy Advisory Committee on 8 March 1996. Aspects of the evidence were checked during the following week and confirmed to SEAC on 16 March 1996. The Ministry and the Department of Health were made aware of the emerging data during this time and the Spongiform Encephalopathy Advisory Committee presented its conclusions and recommendations to the Government on 20 March 1996. The Agriculture and Health Ministers made statements in the House of Commons on the same day. Against that background, the Spongiform Encephalopathy Advisory Committee re-appraised the BSE-related measures then in place and a series of new measures, recommended by the Committee, were implemented in March to May 1996. Further public health questions have been considered and advice given since then.

The nature of BSE

10 A characteristic feature of transmissible spongiform encephalopathies is the accumulation of a diseased form of a normal protein called the prion (or PrP) protein. The abnormal form is believed by many scientists to be the infectious agent, although this is not universally accepted since it does not explain all of the biological features of these diseases. However, the infectious agent, whatever its nature, is intimately associated with the abnormal prion protein. Spongiform Encephalopathies are not contagious like foot and mouth disease. Evidence to date indicates that BSE infection in cattle is acquired by consumption of food or foodstuff containing the infectious agent. All spongiform encephalopathies have long incubation periods. When examined under a microscope, the brain tissue of an affected animal has a sponge-like appearance representing the loss of nerve cells.

11 The peak incidence of BSE has occurred in animals at 4-5 years of age with a range from less than 3 to more than 10 years but confirmed cases of BSE are rare in cattle below the age of 30 months. Most cattle with BSE show a gradual development of symptoms over a period of some weeks or even months, although deterioration can be very rapid. Stress, particularly when cows are brought inside for calving or when cattle are transported, appears to cause more rapid evidence of clinical signs of BSE. Most suspects show several of the following symptoms:

- apprehension, nervousness;
- reluctance to cross concrete, turn corners, go through doorways, permit milking;
- manic kicking when milked;

- high stepping particularly with the hind legs;
- difficulty in getting up;
- tremors under skin;
- loss of condition, weight or milk yield;
- occasionally aggressive to other cattle or to humans.

Suspected cases of BSE

12 There are no tests yet which can identify BSE in live cattle. Since 1988, cattle suspected of having BSE are slaughtered and tests carried out to confirm whether BSE is present, based on microscopic examination of the brain.

Action when BSE is suspected

Anyone in charge of an animal in Great Britain which he suspects of being affected with BSE is required by law to notify the Ministry of Agriculture, Fisheries and Food. The Ministry has issued guidance to farmers on how to recognise symptoms of BSE and what to do if a case of BSE is suspected.

All suspect animals are subject to an inspection by a Ministry Veterinary Officer at the farm. If the Officer suspects that the animal has BSE a restriction order is made. Slaughter is carried out by administering a barbiturate overdose. Ministry contractors remove the carcass which, since mid 1991, is disposed of by incineration. Prior to incineration the head is removed and taken to a laboratory for confirmation of the disease.

Diagnostic tests on the brain tissue of the animal are undertaken by the Veterinary Laboratories Agency, an executive agency of the Ministry. The rest of the head is then incinerated.

In Northern Ireland, suspect animals are required to be reported to the Department of Agriculture. Its Veterinary Service is responsible for subsequent action and its Veterinary Science Division for diagnostic tests at the Department's laboratory.

Since February 1990 (May 1990 in Northern Ireland) 100 per cent compensation, based on current average market prices, has been paid when suspected animals are compulsorily destroyed. Higher rates are payable for unconfirmed cases. There should therefore in theory be no financial incentive for farmers or others to suppress suspected cases of BSE.

When an animal is declared suspect, its details are entered on a BSE database. Separate databases are maintained in Great Britain and Northern Ireland. When the disease is confirmed, this is amended on the database.

Research into BSE

13 Most of the research effort on transmissible spongiform encephalopathies in animals is commissioned by the Ministry of Agriculture, Fisheries and Food and the Biotechnology and Biological Sciences Research Council. The majority of this work is done at the Veterinary Laboratories Agency (an agency of the Ministry) and the Institute for Animal Health. Research work is also carried out in Universities.

14 Research priorities are based on specific needs as these are identified and on advice from the Spongiform Encephalopathy Advisory Committee. Liaison between sponsors of both animal and human health research is an objective of the Transmissible Spongiform Encephalopathy (TSE) Research and Development Co-ordination Group, chaired by the Department of Health.

15 Since 1986, the Government has spent over £56 million on research into TSEs. In the last five years, the Ministry of Agriculture, Fisheries and Food has spent some £38 million on BSE research. Additional funds were made available during 1996-97 and estimated expenditure on BSE research in 1997-98 is £12 million.

16 Research to date and in hand, addresses issues such as the nature of the infectious agent; sources of infection; methods of transmission; pathogenesis of the disease both peripherally and in the central nervous system; monitoring any changes in the pattern, distribution and incidence of the disease; susceptibility and resistance and whether these are age related; methods of inactivating infectivity; improving diagnosis and seeking to identify a diagnostic test in live animals.

Spongiform Encephalopathy Advisory Committee

Advice since March 1996

17 Since the advice provided by the Spongiform Encephalopathy Advisory Committee in March 1996, the Committee has also made statements, in the light of results from research, on the following:

- June 1996 Handling of waste material from cattle, disposal, transport, landfill, incineration.
- July 1996 Risk of exposure of sheep to BSE.

- July 1996 Interim statement on risk of maternal transmission. BSE would die out even in the absence of any form of selective cull.
- April 1997 Further statement on maternal transmission. Confirmed current measures to protect consumers appropriate.
- May 1997 Suggested reinforcement of arrangements for scrapie surveillance and for action throughout the European Union on removal of spinal cord and spleen from sheep and goats and to extend specified bovine material controls to imported cattle.
- June 1997 Summary of key research results into the link between BSE and new variant CJD.
- September 1997 Further statement on research findings on the link, and confirmation that measures to protect public and animal health were in place.
- November 1997 Safety of blood and blood products; production and use of tallow and of gelatin.
- December 1997 Recycling of pig and poultry waste.
- December 1997 Risk of infectivity in boned beef.

18 Since September 1997, public summaries of the Spongiform Encephalopathy Advisory Committee meetings are issued. By 31 December 1997 two such summaries had been issued.

Appendix 2

Review of short term market support measures

1 The risk of a disorderly collapse of the beef industry led the Agriculture Departments to introduce a series of schemes to support the market throughout the United Kingdom. These were designed to address immediate problems following the beef export and animal feed bans and to cushion the impact on some sectors of the industry and the market relationship between those sectors. Paragraphs 3.13 to 3.17 and Figure 19 of this report summarise the purpose and nature of those schemes.

2 Because of the need to act without delay, for a number of schemes the departments relied on the statutory authority of the Appropriation Act in making urgent payments. Approval by the Treasury was also required as such expenditure was met from the Contingencies Fund. The departments subsequently submitted supplementary estimates and appropriate legislation in order to obtain Parliamentary authority for these schemes. The schemes subject to emergency expenditure in this way were:

- the Slaughtering Industry (Emergency Aid) Scheme;
- the Rendering Industry Support Scheme;
- the Beef and Beef Products (Storage and Disposal) Scheme;
- the Animal Feed Recall Scheme; and
- the Over Thirty Months clean beef top-up supplement (paragraphs 2.41-2.43)

3 In addition the National Audit Office examined how the rates of aid payable were determined, taking account of the purpose of the scheme and the nature of the market. The results of our examination for each of the schemes are given below. This also includes a brief review of already existing market support schemes where payment rates or levels of activity were increased following the crisis.

Beef Marketing Payment Schemes

4 Two schemes were introduced to support beef finishers who were affected by the fall in market prices in respect of adult animals on farms before 20 March 1996 and sold for human consumption:

- The first scheme, funded by the European Union under European Regulation 1357/96, provided for payments in respect of the sale of such animals between 20 March and 30 June 1996. The rate of payment was determined by dividing the total amount of money made available by the European Union, £29 million, by the number of animals sold. This produced flat rate headage payments of £66.76 per animal.
- The European Regulation also allowed the United Kingdom to make available national aid up to the equivalent amount funded by the European Union. Therefore the Ministry introduced a second Beef Marketing Payment Scheme, on the same basis as the first but in respect of adult cattle sold from 1 July to 30 September. The rates of payment were calculated on the same basis as the scheme funded by the European Union. When the Ministry found that the amount payable in total to farmers for that period was less than that available, due to lower numbers of sales than predicted, an extension to the scheme was made to cover animals sold from 10 October to 9 November 1996. The flat rate headage payments were £55 per animal for the first period and £34 for the second.

5 These schemes were completed in 1996-97 and the total amount paid to producers was £58 million.

Aid to the Slaughtering Sector

6 As a consequence of the announcements in March 1996 and the European ban on United Kingdom beef exports, there was a risk that the meat supply chain would collapse. On 4 April, the Ministry commissioned Coopers & Lybrand to assess the impact of the BSE crisis on the slaughtering and cutting plant sector. In their report in April 1996, Coopers concluded that there was a genuine crisis in the industry and that urgent action was needed. The threat arose largely from a build-up of unsaleable stocks which threatened the financial viability of many companies.

7 Aid to meet this threat was announced to Parliament on 16 April 1996. The support was provided through the Slaughtering Industry (Emergency Aid) Scheme, which comprised the following two elements:

- The “throughput element”. Payments were to be made to all slaughterhouses, which continued to slaughter bovine animals, of £9.50 for every bovine slaughtered in 1995-96. This replaced the Government’s original intention, announced to Parliament on 3 April 1996, to relieve slaughterhouses from Meat Hygiene Service red meat inspection charges for a year. The total amount allocated to this scheme was £29.9 million, an amount equivalent to the Meat Hygiene Service charges for 1995-96. Payments were made to slaughterhouses regardless of whether they had paid Meat Hygiene Service charges.

- The Beef Stocks Transfer Scheme. This was introduced by the Ministry in May 1996, and provided licensed abattoirs and cutting plants with the opportunity to transfer ownership of beef to the Intervention Board in return for support payments. Claims would only be met for bovine meat derived from animals slaughtered in the United Kingdom which, because of the disruption to the market, could not be sold for human consumption on the same terms as before the disruption, and which was owned by the claimant on 9 April 1996. The Intervention Board paid for the stocks at 65 per cent of the pre-crisis market prices. Rates varied from £209 to £3169 per 1000 kilograms depending on the type and quality of the beef. The costs of the scheme in 1996-97 were £48 million for support in respect of transferred stocks and an estimated £3 million for the transport, storage and disposal of these stocks.

8 This aid was separate from additional work undertaken by abattoirs in participation in the Over Thirty Month Scheme.

Rendering Industry Support Schemes 1996 and 1997

9 As a result of the loss of markets for its main products, meat and bone meal and tallow, following the announcement on 20 March 1996, the rendering industry was faced with the loss of most of its income. The Government were concerned that if renderers sought to recover this loss by increasing their charges to suppliers of raw material, this would add to the financial difficulties faced by the slaughtering sector and increase the risk of a disorderly collapse of the meat chain. Accordingly, the Ministry devised a scheme of support for the rendering industry which, together with the support for the slaughtering sector, was designed to maintain these essential links in the meat/supply chain.

10 Initially, the Ministry paid support to full renderers under an interim scheme, pending the design of a final scheme for 1996-97. This interim scheme eventually covered the period from 1 April 1996 to 10 November 1996. Payments were made four-weekly on account with the first payments being made from 15 April. Support was based on the loss of income to individual renderers by comparison with 1995-96 and the formula used was refined during the period of the scheme to enable individual renderers' support to match more closely their loss of income. In return for receiving support, renderers undertook to maintain their prices/charges for raw materials at levels which applied before 20 March 1996. The conditions under which support was paid were set out in agreements with each individual renderer receiving support. Payments on account were made on the understanding that actual entitlement to support would be determined by the terms of the final Scheme and that adjustments would be made as necessary to subsequent payments. Under this interim scheme the Ministry paid out £66 million to 18 renderers.

11 The Ministry commissioned Coopers and Lybrand to produce a report on the rendering industry. Their report, available in December 1996, concluded that the crisis had had a major impact on the rendering industry to the extent that its role in the supply chain might undergo permanent change. This report formed the basis for advice which Coopers gave on the design of the rendering industry support arrangements.

12 The full scheme for 1996-97 (The Rendering Industry Support Scheme 1996) was made on 17 December 1996. This followed extensive discussions between the Ministry and representatives of the rendering industry. This further refined the support calculations used in the interim arrangements with a view to ensuring that individual renderers were not oversupported, and extended support to part-renderers. New provisions were designed, for example to ensure that renderers did not receive support under the Scheme for rendering material processed under the Over Thirty Month Scheme, and to make support payments take broad account of changes in the throughput and costs experienced by individual renderers in comparison with 1995-96. Adjustments were made to payments under the full scheme to reflect any differences between individual renderers' receipts under the interim scheme and the level of support for the period 1 April to 10 November as calculated under the full scheme.

13 The total expenditure on support in respect of 1996-97 for the 23 renderers eligible was, following a final verification exercise, about £97 million of which some was paid in the following year. Coopers and Lybrand were employed by the Ministry to verify all support entitlements.

14 Support arrangements for 1997-98 were made in March 1997, again following consultation with interested parties. The Government commissioned another report from Coopers and Lybrand, on the prospects for recovery in the markets for renderers' products, in order to inform Ministers' decisions on the design of a new scheme. The Rendering Industry Support Scheme 1997 provided for support to be phased out by the end of 1997-98 within a spending limit of £59 million for the year. Support was based on renderers' production of tallow and unsaleable meat and bone meal, and there was no obligation on renderers to maintain prices or charges. On 24 July 1997 the Government confirmed that support would be phased out by the end of 1997-98 within the existing spending limit.

Beef and Beef Products (Storage and Disposal Services) Scheme

15 As announced to Parliament by the Minister of Agriculture, Fisheries and Food on 16 April 1996, the Government did not consider that support equivalent to that given to the rendering and slaughtering sectors should be extended to other sectors. However, in the interests of public health and market confidence it asked the Intervention Board to accept responsibility for the disposal of unsaleable stocks of beef and beef products at public expense. This was put into practice through the Beef and Beef Products (Storage and Disposal Services) Scheme 1996. Coopers and Lybrand, in their second report to agriculture Departments, found no substantive data to cause them to suggest that the policy on extension of support should be revised.

16 Under this scheme traders could pass beef and beef products rendered unsaleable by the disruption to the beef market to the Intervention Board for disposal or could retain and dispose of the product and be reimbursed by the Board for doing so. Participation in the scheme was voluntary and there were no payments for the stocks themselves. Storage costs were normally reimbursed at £0.35 per tonne per week for material at ambient temperature and £3 per tonne per week for products in cold storage. The closing date for applications was originally 27 September 1996, later extended to 31 October 1996. Costs of the scheme in 1996-97 were £1 million.

Animal Feed Recall Scheme

17 On the advice of the Spongiform Encephalopathy Advisory Committee, legislation was introduced in March and April 1996 prohibiting:

- the **sale or supply** of any mammalian meat or bone meal or any feed containing such material for feeding to farm animals;
- the **use** of such material for feeding farm animals; and
- from August 1996, the **holding** of such material and requiring that premises, machinery and vehicles in contact with the material be thoroughly cleansed and disinfected.

18 On 10 June 1996, the Ministry introduced the Animal Feed Recall Scheme whereby prohibited material, registered with the Ministry by 1 July 1996, would be collected and disposed of, free of charge. The aim was to ensure that residual stocks of mammalian meat and bone meal and feed containing it were removed from farms, feed mills and feed merchants before the ban came into effect. The supply trade organisations, UKASTA and NIGTA, co-ordinated the collection on behalf of the Ministry and the Department of Agriculture for Northern Ireland, respectively. UKASTA collected some 11,000 tonnes; 96 per cent came from feed mills and the remainder from farms and feed merchants. NIGTA collected some 1,200 tonnes in Northern Ireland. All this material was fully disposed of by May 1997. For 1996-97, storage and transport costs were some £250,000 and disposal costs were £95,000. Costs for 1997-98 were a further £260,000 for storage and £220,000 for disposal. The scheme did not provide for payments in respect of the value of the feed.

Support to the hide industry

19 With the exception of hides, all products of Over Thirty Month Scheme cattle are destroyed. Hides from over thirty months old animals can be treated and used in leather production in the UK or exported after partial treatment. This exemption is allowed on the condition that the by-products, such as the flesh and trimmings attached to the hide, are destroyed in order to prevent them entering the food chain. The Ministry introduced the Movement of Hides Scheme and the Intervention Board was directed to operate it. Under the scheme registered tanners are paid to operate the appropriate controls on by-products and also in compensation for the loss in value of the hide. The rate of £4.75 a hide was determined in negotiation with the industry. In addition the British Leather

Confederation are paid £0.15 a hide (£0.11 from 1 July 1997) to administer the control system on hides. The hide industry scheme was started without Treasury permission as the Ministry staff thought they had authority to introduce any necessary schemes. Treasury approval was given retrospectively in February 1997.

20 Expenditure in 1996-97 was £4 million for some 832,000 hides. A further £2.6 million was paid to 30 September 1997 on eligible hides carried over from the previous year, this expenditure being included in the ongoing disposal costs under the Over Thirty Month Scheme.

Extensions to existing support schemes

21 As a result of the beef crisis, amounts payable under existing schemes were increased in accordance with their objectives of producer support or, in the case of intervention stocks, activity was expanded.

22 European Regulation 1357/96 allowed top-up payments to be made under the existing beef support schemes - the Beef Special Premium Scheme and the Suckler Cow Premium Scheme. These took the form of additional headage payments on the basis of numbers of animals on which subsidy was paid under the 1995 schemes. Initial payments at the rate of £19.70 per animal under the Beef Special Premium Scheme and £23.13 per animal under the Suckler Cow Premium Scheme were subsequently adjusted to reflect the number of animals on which subsidy was paid under the 1996 schemes. This required part repayment of supplement from producers who were paid on fewer animals under the 1996 scheme than under the 1995 scheme and full repayment from those who were paid under the 1995 scheme but not under the 1996 scheme. Repayment was made by offset against 1996 scheme balance payments wherever possible. The money recovered has been redistributed to producers who were paid on more animals under the 1996 scheme than under the 1995 scheme.

23 The aid payable under these arrangements amounted to nearly £79 million. Detailed figures of the amount of supplement paid, the amount recovered for redistribution and the state of play of the recovery and redistribution exercise are given in the following figure:

Top-up payments on Beef Special Premium and Suckler Cow Premium Schemes

	Beef Special Premium Scheme	Suckler Cow Premium Scheme
Top-up payments - amount	£42.6 million	£36.0 million
Number of producers receiving payment	87,000	55,800
Number of animals on which payment was based	2.16 million	1.6 million
Recovery of supplement		
Number of producers:		
■ with no 1996 claim	11,300	4,400
■ where 1996 claim was for fewer animals than 1995 claim	30,000	4,800
Total amount to be recovered	£7.7 million	£1.7 million
Amount outstanding at 1 February 1998	£340,000	£110,000
Redistribution of supplement		
Number of additional animals on which subsidy was paid in 1996 compared to 1995	364,000	75,000
Redistribution payment rate per additional animal	£20.20	£21.20

24 European Council Regulation (EC) No 2443/96 provided Member States with an additional allocation of funds for support to the beef and veal sector. The United Kingdom share of these funds amounted to £52.17 million. The majority of this, around £49.5 million, was used to make additional payments to suckler cow producers in the form of a flat rate payment of £30 per animal on which subsidy was paid under the 1996 Suckler Cow Premium Scheme. Of the remaining funds, £2.25 million was allocated to the Meat and Livestock Commission and £0.25 million to the Livestock and Meat Commission in Northern Ireland to help fund beef promotion measures. A further £45,000 was used to fund the Veal Marketing Payments Scheme which provided aid of £36 per eligible animal to veal producers who sold veal calves for slaughter for human consumption between 20 March and 9 November 1996.

25 Because of the effect of the beef crisis on farm incomes in the Less Favoured Areas, an additional £60 million was also distributed to producers in these areas using the vehicle of the 1997 Hill Livestock Compensatory Allowances (HLCA) scheme. This was in the form of a significant increase in the HLCA payment rates per eligible suckler cow - an extra £50 per animal in Severely Disadvantaged Areas and £46 per animal in Disadvantaged Areas.

26 The advantages of providing support through the vehicles of existing schemes were that:

- underlying data on the number and eligibility of the animals had already been collected;
- the burden on farmers and other producers was low as they did not need to submit application forms for this aid; and
- the additional costs to the Ministry and other territorial departments of administration were lower than if new temporary schemes were devised.

27 The disadvantage with the first top-up payments to the Beef Special Premium Scheme and the Suckler Cow Premium Scheme was the significant administrative effort involved in arriving at the level of money to be clawed back from producers who were paid for fewer animals in 1996 than in 1995; recovering the money from the producers; and then distributing this recovery to those producers who were paid for more animals in 1996 than in 1995.

Purchases into intervention stocks

28 Following the 1992 CAP reform, intervention activity in beef was reduced to two categories of steers in Great Britain and four types in Northern Ireland. At the time, the Board considered that intervention was an ineffective way of controlling the market and should be limited to times of extreme crisis.

29 With the collapse of the beef market, Ministers gave an undertaking to make the best use of intervention and expanded activity to include six types of steers and young bulls for the United Kingdom. Provision for intervention on forequarters was also introduced as these are likely to be the source of meat processed into mince and burgers and were hardest hit by the crisis.

30 Between March 1996 and September 1997 the Board made intervention purchases of 107,000 tonnes of meat from steers and 14,000 from young bulls at a cost of £232.2 million. The cost of boning, transport, freezing and storage was an additional £63 million. As at 30 September 1997 the United Kingdom beef stock level was some 74,800 tonnes with a book value of £75.4 million.

31 In addition, the Intervention Board repurchased intervention stocks worth £2.4 million which had been sold immediately prior to the announcement on 20 March 1996.

Appendix 3

Comments from sectors of the Beef Industry

1 The National Audit Office wrote to some 75 organisations in May 1997 offering them the opportunity to comment on the financial management and operation of the schemes introduced as at that time as a result of the announcement on 20 March 1996. Some 30 organisations replied although some replies indicated they had no comments to offer. The contents of the replies were used to increase the National Audit Office's understanding of the impact on the various sectors of the industry of the schemes examined in this report.

2 In order to assist organisations in their replies, the NAO suggested the following topics might be of particular interest in the context of the study:

The design of all schemes

- the selection of abattoirs, collection centres
- eligibility criteria

The operation of schemes

- access to schemes by farmers and others
- the availability of advice
- adequacy of checking procedures
- support rates
- payments of claims
- extent of conflicting interests posed by processing other products

Fraud and Irregularity

- scheme weaknesses
- the scope for fraud or irregularity
- allegations of complicity in manipulating markets

Health and safety aspects

The impact of schemes and the need for continuing support

- the need and reasons for continuing support
- the impact of the Calf Processing Aid Scheme
- the extent of any problems in future years as the scale of the crisis declines

3 The National Audit Office also asked for comment on the extent of consultation by the Agriculture Departments and the Intervention Board in setting up and changing schemes. Most of the organisations felt that the Ministry, other Agriculture Departments and the Intervention Board had consulted widely on most relevant occasions although perforce the times allowed for responses had been limited.

4 The following is a brief summary of the responses applicable to the general themes indicated in paragraph 2. At the time views were requested, May 1997, the Selective Cull was relatively new and so comments relate only to the design of the cull and not the implementation.

Association of British Abattoir Operators

The Association thought that the initial slaughter fee on the Over Thirty Month Scheme was some three times a commercial rate of about £40 an animal and that the Government had therefore paid out more than it needed. The Association thought that the selection criteria for abattoirs had been arbitrary. Those abattoirs fortunate to be selected had been able to benefit from this to gain a larger market share in other meat trade. The Association had advocated an early move to competitive tendering for Over Thirty Month Scheme slaughter.

Association of Livestock Exporters

Efficient working of the schemes and cattle traceability must be the foundation of the controls and integrity necessary for the re-opening of the beef export market.

British Leather Confederation

The British Leather Confederation is involved in the processing of controlled hides from animals slaughtered under the Over Thirty Month Scheme and has worked with hide markets, tanners and abattoirs to ensure correct administration and practices of the scheme. Without the trade in controlled hides, the extra burden on renderers and incinerators would have made the scheme more difficult to operate. It has also reduced scheme costs by removing the burden of providing compensation for the hides to the abattoirs. The Confederation was concerned about the withdrawal of support for the hide industry, given the additional costs incurred by it for the separation of hides from Over Thirty Month cattle and ordinary cattle. If the industry were to withdraw from the work, this would throw yet more costs onto the Intervention Board.

British Meat Manufacturers' Association

The Association was concerned that cull prices paid were excessive and after the initial stages should have mirrored market rates. The Calf Processing Aid Scheme would result in the United Kingdom bearing a disproportionate share of the burden of the European Union's aims for reduction of the beef herd. The Association wished to see the Rendering Industry Support Scheme continued so that the burden of disposal of meat and bone waste does not make United Kingdom industry uncompetitive. Manufacturers were not given support to pay for the storage of unsaleable stocks held in March 1996 until three months later by when much of the stock had been destroyed. The support was not for the stocks themselves but for storage and the payments, of claims was exceedingly slow. The Association would like to see a better system of traceability for intervention beef to meet the requirements of retailers and thus to create greater demand for such beef.

British Veterinary Association

Although the veterinary profession had had very little to do with the financial operation of the BSE schemes, the British Veterinary Association did offer comments on the operation and administration of the schemes which were applicable at that time. The principal comments were as follows:

The need for formal training of Meat Hygiene Service staff, particularly Principal Officer Veterinary Surgeons, had been underestimated. Veterinary surgeons has experienced some difficulties in ageing cattle as the cattle birth record documents were not always reliable and ageing cattle from their teeth was an inexact science. Support rates were considered satisfactory if not generous at times. They should not have been changed at weekends or Bank Holidays where an influx of cattle could create welfare difficulties in some abattoirs. Continuing financial support was imperative if the Over Thirty Month cattle were to be kept out of the food chain. The Calf Processing Aid Scheme had resulted in the slaughter of 500,000 healthy calves, a fact which the British Veterinary Association found abhorrent.

Cold Storage and Distribution Federation

The shortage of trained Intervention Board staff caused some difficulties, including slowness of payments. The Federation consider that the Intervention Board will have some difficulty in verifying the numbers of cartons of beef as they were taken into cold store by gross weight rather than by normal verification procedures. It also had several concerns over safety: that the Ministry's proposals for cleaning cold stores which have held Over Thirty Month beef are not radical enough and the taking in of beef at high temperatures may adversely impact on the future use of the stores. The Federation expressed concerns that landfill disposal of beef products after storage could contaminate water supplies.

Country Landowners Association

There was serious concern about the delay in starting the Over Thirty Month Scheme and the backlog of animals awaiting access to the scheme. This was compounded by the uncertainty over the Selective Cull. The use of dentition checks to determine the age of cattle led to problems in establishing the eligibility of some animals. The geographical spread of abattoirs selected to slaughter animals for the Scheme was not even. Effort to increase cold storage and incineration capacity was too slow, as was the registration scheme to identify the size of the backlog awaiting slaughter. There were allegations of complicity in manipulating markets with dealers buying up animals at below nominal values with deals with abattoirs for preferential entry for these animals. In 1996 payments to farmers were often late although matters have improved in 1997.

The Calf Processing Aid Scheme was a useful short term measure. There had been concern that the scheme had put a floor in the market, thereby raising overall costs and reducing competitiveness and opening the market to imports.

The Selective Cull was unnecessary except to ensure the lifting of the export ban as none of the animals so slaughtered would have entered the food chain. The 10 per cent threshold below which consequential losses are deemed not to occur is too high.

The Association also provided comments on the background to all the other schemes operating at the time of its reply.

Farmers' Union of Wales

Farm gate prices for beef cattle had fallen 25-30% in the wake of the BSE crisis and producers are bearing an ever increasing proportion of the costs associated with the stringent control measures designed to safeguard human health. There is universal acceptance that farmers were not to blame for the crisis and the Farmers' Union of Wales firmly believed that Government has a moral obligation to adequately support beef producers until such time as the industry is free from the effects of BSE. The Farmers' Union of Wales was disappointed that some sectors of the beef industry, most notably heifer rearers, derived little benefit from the additional support measures paid in 1996-97. Many of these additional payments were subject to an unacceptable level of delay due to the added burden which was placed on staff at a divisional office level.

However, support measures were to be largely discontinued in 1997-98 against a background of weaker market prices and continued reductions in the value of Over Thirty Month Scheme and Calf Processing Aid Scheme animals. The two reductions in the Over Thirty Month Scheme rate and the introduction of a 560kg weight limit, together with a rationalisation of the number of abattoirs involved in the scheme, have more than halved the value of quality cows from their pre-BSE levels.

In sum, the Farmers' Union of Wales acknowledged that many of the problems which arose on the operation of BSE support schemes were ultimately resolved satisfactorily but were extremely concerned that any further cuts to existing compensatory measures would have major consequences for already beleaguered beef producers.

Federation of Fresh Meat Wholesalers

The Government responded quickly and effectively in response to the crisis. Payments under the support schemes undoubtedly contributed to the survival of the beef industry although some sectors of the industry, such as beef exporters and beef product manufacturers, felt that the support did not go far enough. Conflicts of interest between plants processing cull animals and those also wishing to process under thirty month old cattle, and in some cases sheep and pigs, were resolved early in the crisis either by plants making commercial judgements, or by their customers making decisions on sourcing their meat supplies. Conflicts with regard to the source of cattle for the Over Thirty Month Scheme, that is through auction markets or direct from farmers to abattoirs were eventually resolved but not to everyone's satisfaction. The Federation believed that there was a need for continued support until the United Kingdom can compete on equal terms. The impact of the Calf Processing Aid Scheme will be to create a beef shortage in eighteen months with the British beef industry bearing a disproportionate share of the reduction in the European Union's overcapacity. Overcapacity in the slaughter sector of the beef industry remains.

Hill Farming Initiative

In general terms, farmers were unhappy that so much emphasis was given to the rendering industry. Information and advice to farmers was initially not available especially on casualty animals. Consultation was too little, too late and did not sufficiently inform development of the schemes. Little recognition of the problem of suckler herds. There were instances of late payments. Some markets received allocations from abattoirs while others received none. Support to farmers in 1996 helped maintain viability but continuing support is necessary in view of market prices. Suckler cow farming is crucial to less favoured areas.

Holstein Friesian Society of Great Britain and Ireland

The Society was generally happy with the conduct of the schemes which affected its members, except for some late Over Thirty Month Scheme payments by the Intervention Board.

Institute of Trading Standards Administration

Trading Standards Officers play a very important role in the enforcement of a wide range of regulations relating to BSE. The cost of the regulatory regime at local level is a matter of concern to local authorities. The Institute has worked with the Intervention Board in alleged breaches of the Over Thirty Month Scheme.

Licensed Animal Slaughterers and Salvage Association

The selection of abattoirs for the Over Thirty Month Scheme was complicated and needed to balance proximity of cattle populations, the availability of rendering capacity and cold storage and livestock collection centres. Given these constraints, then the scheme developed was close to being optimal. There are anecdotal stories of farmers having difficulty in getting access to the scheme in 1996 but this appears to be due to a local shortage of slaughter facilities. Downward changes in support rates caused premature presentation of stock resulting in excess slaughter in some weeks. The Over Thirty Month Scheme should remain, as it seems likely that the United Kingdom market will eventually return to normal, but needs support at the moment. There may be disposal industry problems in the future when new additional incineration capacity created to meet current needs is no longer required.

Livestock Auctioneers' Association

The Over Thirty Month Scheme had been well run, considering that the Intervention Board had no previous experience of dealing directly with the livestock industry. It was no mean achievement by the administrators and the operators to have organised the slaughter of 1 million animals. However Intervention Board payments to collection centres (markets in particular) were for a long time very slow. The computer problems which were clearly responsible for this had only been corrected some 12 months later. Many of the forms were not user-friendly. The registration scheme to assess the backlog was redundant by the time it was introduced in the autumn of 1996. The "belt and braces" approach to fraud prevention could be counter-productive by spending large amounts of money on recovering small sums.

National Cattle Association

The Association was generally content with the conduct of the schemes but was concerned about the slow payment of Over Thirty Month Scheme claims.

National Farmers' Union and National Farmers' Union (Wales)

As the Over Thirty Month Scheme was unprecedented there were teething difficulties and mistakes made, some of which were unavoidable but others had important consequences for farmers. The use of dentition to determine age is unreliable and caused problems when it contradicted documentary evidence. With the limited rendering capacity as the key bottle-neck, there should have been co-ordinated administrative procedures to monitor rendering and slaughtering capacity, to ensure fairness between auction markets and abattoirs in the sourcing of animals, to allocate cattle to individual abattoirs and to ensure orderly and fair access by farmers to the Scheme. The introduction of an arbitrary coefficient of 2 to convert the deadweight to liveweight of animals to determine the payment made deadweight sales very attractive. The correction of this in July 1996 penalised those farmers

who had not managed to get their cattle into the Scheme during this time compared with those who had. The Intervention Board did not make payments within set targets in 1996 but since then claims have been processed more efficiently. It is essential that the Scheme remains in operation until a long term market for animals over 30 months is re-established.

On the Calf Processing Aid Scheme, the limited number of abattoirs participating in the Scheme initially and the 10 day age limit led to very low prices for calves but as more abattoirs entered the Scheme and the age limit increased to 20 days, prices went up to £90 a head. While the Scheme was an effective short term measure, the United Kingdom has taken an unfair burden in rebalancing the European Union beef market.

The Rendering Industry Support Scheme offset the losses in revenue resulting from the collapse in the market for meat and bone meal and tallow which would otherwise have fallen on the livestock sector. It is essential that this Scheme is retained in order to maintain United Kingdom competitiveness as in some EU countries there are still markets for these products.

Intervention for young bulls should continue until the beef export ban is lifted.

It is vital that the enhanced level of Hill Livestock Compensatory Allowances is retained if suckler herds are to be maintained in the hills and uplands.

There was a high level of uncertainty about whether the Selective Cull would take place or not. The Cull needed to take place as a key element in the re-opening of United Kingdom export markets but it was viewed as wasteful and unscientific by producers. The slow progress of implementation was a concern. Early differences of interpretation of the scheme within the Ministry had been resolved. The levels of compensation are not high enough, especially for herds which lose a large proportion of their animals and the cap on the maximum value of an animal of £1,000 is too low.

National Farmers' Union of Scotland

There were substantial delays to the removal of animals in the Over Thirty Month Scheme, in particular in outlying areas such as the Orkney Islands. The situation was eased by the introduction of increased rendering capacity and cold storage facilities.

Due to reductions in compensation rates to farmers and processing delays, lower rates were paid than were available when farmers first wanted to enter cattle into the scheme. The level of compensation available under the Over Thirty Month Scheme is a major issue for farmers.

Timing of initial and extended qualifying periods for the Beef Marketing Payments Scheme did not suit the seasonal patterns of finished cattle sales in Scotland

Delays in implementing the Selective Cull created uncertainties for farmers, in particular on the use of quotas. The Union were critical of the decision to restrict compensation to 90 per cent of the replacement value of female animals, and to implement enhanced payments only when more than 10 per cent of the herd is slaughtered.

Intervention did not provide the full extent of market support to sustain prices.

To prevent a severe reduction in production capacity, support measures would be necessary for some time. Scotland had previously exported 20 per cent of its beef production. With the Over Thirty Month Scheme and the Calf Processing Aid Scheme, the United Kingdom has borne the brunt of the rebalancing of the European Union beef market. The Rendering Industry Support Scheme should continue, or some other way devised, to prevent the costs of waste disposal falling on already hard-pressed producers.

Marketing promotions and farm assurances schemes are essential in rebuilding consumer confidence and improving demand for beef.

Quality Meat and Livestock Alliance

The Alliance remarked on the confusion created by the sudden arrival of a tidal wave of public money, with powerful industry interests being first at the trough. It was of the opinion that any investigation which did not question the underlying policy, including the necessity and appropriateness of the schemes, was not worthwhile.

Scottish Association of Meat Wholesalers

There were teething problems with the schemes because of the necessary speed of implementation and the Intervention Board had significant staffing difficulties to resolve. Potentially there may be major problems when the beef export ban is lifted because of the uncompetitiveness of the United Kingdom industry with offal values and rendering income severely reduced. With the Calf Processing Aid Scheme, the United Kingdom industry appears to be bearing an unfair proportion of the European Union reduction of the cattle herd to meet the loss of beef consumption in Europe existing even before the crisis.

Scottish Consumer Council

Financial support to the abattoir industry in the Over Thirty Month Scheme has exacerbated the overcapacity already existing. The withdrawal of support to the rendering industry might result in more carcasses being buried in landfill sites with consequent risks especially to water courses.

Smithfield Market Tenants' Association

The Association was disappointed that no support was given for market traders. It also found that the effect of intervention on demand in the United Kingdom market worked against market traders' businesses.

United Kingdom Agricultural Supply Trade Association Ltd

The United Kingdom Agricultural Supply Trade Association administered the Feed Recall Scheme as agents for the Ministry and considered that the system was simple and effective and ran smoothly.

United Kingdom Association of Frozen Food Producers

The introduction of the Over Thirty Month Scheme made it impossible to sell products in store made from beef over 30 months and manufacturers were given no compensation for the massive withdrawal of stocks. As a result, some manufacturers have gone out of business and those that remain have borne significant costs. The introduction of the Calf Processing Aid Scheme provided a short term solution but would make the United Kingdom more dependent on imports in the longer term.

United Kingdom Renderers' Association Ltd

United Kingdom Renderers' Association welcomed the Rendering Industry Support Scheme as a response to the collapse of the market for rendered products and generally had no criticism of the way the scheme was introduced. The Association had, however, been concerned about the speed of payment by the Intervention Board on the Over Thirty Month Scheme. The Association also believed that expeditious execution of the scheme depended on the utilisation of a limited number of abattoirs close to the renderers and that the slaughter fee negotiated with the abattoirs was too high. It thought the animal feed recall scheme had been efficiently administered.

Chronology of Events and Progress in the First Twelve Months Following the Announcement of a Link between BSE and CJD on 20 March 1996

	March 1996	April 1996	May 1996	June 1996	July 1996	August 1996	September 1996	October 1996	November 1996	December 1996	January 1997	February 1997	March 1997	
Announcements		<p>20 March Secretary of State for Health announces link between BSE and CJD and Minister of Agriculture announces Government acceptance of SEAC recommendations</p> <p>27 March European Union ban on exports</p> <p>29 March Ban on sale of over-30-month cattle</p> <p>3 April Arrangements for slaughter and disposal of Over Thirty Month cattle (OTMS)</p>	<p>May SEAC advice that landfill is acceptable disposal method</p>	<p>21 June EU Council sets pre-conditions for lifting ban</p>		<p>1 August EU regulation effective for financial support for a selective cull</p>								
Scheme proposals starts of schemes		<p>April Options for implementing selective cull considered</p> <p>15 April Rendering Industry Support Payments started</p> <p>16 April 1. Slaughter Industry (Emergency Aid) announced 2. Beef and Beef Products (Storage and Disposal) Scheme.</p> <p>22 April Calf Processing Aid Scheme</p> <p>29 April Over Thirty Month Scheme into operation with EU agreement</p>		<p>June Detailed planning of selective cull commences</p> <p>10 June Animal Feed Recall Scheme</p>	<p>1 July 1. Ban on holding illegal animal feed effective 2. Cattle passports required from this date</p>		<p>29 July Consultants engaged to recommend cattle traceability scheme</p>	<p>1 September Consultants' report on cattle traceability</p> <p>1 September Beef Assurance Scheme introduced</p> <p>19 September Work suspended on planning selective cull</p>		<p>November Case put to Treasury for traceability system</p>	<p>December Suspension of work on selective cull lifted</p> <p>1 December Ministerial approval sought for cattle traceability scheme</p> <p>December Full rendering Industry Support Scheme (1996-1997) introduced</p>	<p>January Selective cull comes into operation</p>	<p>February Proposals to EU on Export Certified Scheme</p>	<p>March Rendering Industry Scheme 1997-98</p>
Progress and scheme changes		<p>April OTMS planning, abattoirs invited to express interest; new computer system planned</p> <p>4 April Consultants commissioned to assess impact of crisis on slaughter industry</p> <p>22 April CPAS first calves slaughtered</p> <p>3 May 1. First OTM Scheme animal slaughtered 2. Scheme amended to allow animals to enter via abattoirs</p>	<p>April/May Estimated backlog 130,000 cattle</p> <p>May 17,500 calls to helpline</p>	<p>June First invitation to tender for additional incineration capacity</p> <p>26 May List of abattoirs extended from 21 to 42</p>	<p>28 June Deadline for applications for advance payments to farmers on OTMS</p>		<p>26 July CPAS age limit extended</p>	<p>27 September Closing date for applications on Beef and Beef Products Scheme</p>		<p>21 October Temporary OTMS registration scheme</p>	<p>1 December CPAS expanded to male calves under 20 days</p>	<p>January 1. Second invitation to tender for increased incineration capacity 2. Contract for incineration of meat and bone meal</p>	<p>25 February OTMS invitation to abattoirs to tender</p> <p>28 February First animal slaughtered in NI under selective cull</p>	<p>21 March 1st selective cull slaughter in Great Britain</p> <p>31 March OTMS number slaughtered reaches 1.35 million</p>
Payment Rates		<p>April 1. OTMS slaughter fee set at £87.50 each 2. Rendering fee set at £105 per tonne 3. Payment rate to farmers £0.86 per kg</p>		<p>17 June OTMS top-up payment reduced</p>	<p>July 1. Consultants' report on slaughter fees 2. OTMS top-up further reduced 3. Advance payments made to farmers</p>		<p>5 August Deadweight payment rate reduced</p> <p>26 August Slaughter fee reduced to £41</p>		<p>October 1. New OTMS agreement with renderers £75-105 2. Agreement with EU that 80% reclaimable after rendering</p> <p>21 October OTMS payment rates to farmers reduced</p>	<p>8 November Top-up payments phased out</p>	<p>December Consultant's report on rendering industry</p>	<p>January New contract with renderers £105/tonne, including disposal of frozen carcasses</p>		