

**UDENRIGSMINISTERIET**

**EUROPAUDVALGET**  
Alm. del - bilag 1751 (offentligt)

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Bilag  
1

Journalnummer  
400.C.2-0

Kontor  
EU-sekr.

1. oktober 2001

Til underretning for Folketingets Europaudvalg vedlægges Fødevareministeriets skrivelse, pressemeddelelse, Contingency Plan samt notits fra veterinærdirektør P. Willeberg vedrørende muligheden af forekomst af BSE hos får.

Materialet er samtidig hermed oversendt til Folketingets Udvalg for Fødevarer, Landbrug og Fiskeri.

./.. Til orientering vedlægger jeg pressemeddelelse samt Contingency Plan, som d. 28. september 2001 er udsendt af de britiske myndigheder.

./. I vedlagte notits af 28. september 2001 fra veterinærdirektør P. Willeberg redegøres for drøftelsen i veterinærchef mødet d. 26.-28. september om muligheden af forekomst af BSE hos får.

Materialet er samtidig oversendt til Folketingets Udvalg for Fødevarer, Landbrug og Fiskeri.

## Engelsk beredskab for BSE

EU's videnskabelige komité har siden slutningen af 1990'erne beskæftiget sig med spørgsmålet om forekomst af BSE i får.

Arbejdet er endnu ikke afsluttet, men den britiske regering offentliggør i dag et udkast til en beredskabsplan, som skal anvendes i tilfælde af forekomst af BSE i får.

I introduktionen til beredskabsplanen står følgende:

*This consultation document seeks views on the actions to be taken should BSE be found to be present in the United Kingdom sheep flock. The document has been prepared purely on a contingency basis. The present situation is that no BSE has been found to occur naturally in sheep. The contingency plan is part of the Government's precautionary strategy for risk management and the protection of public health. It will also serve towards meeting an obligation placed by European Union legislation on the United Kingdom and all other Member States of the European Union to draw up such plans.*

Offentliggørelsen af det engelske udkast skal ses i sammenhæng med en videnskabelig undersøgelse af BSE hos får, som har været drøftet på et møde med EU's veterinærchefer den 26.-28. september 2001. Undersøgelserne er endnu ikke afsluttet, og forventes fortsat drøftet i EU's videnskabelige komité.

EU's veterinærchefer finder ikke, at der er grundlag for at træffe konkrete foranstaltninger på nuværende tidspunkt.

BSE og den beslægtede sygdom scrapie er hverken konstateret hos får i Danmark eller hos får fra New Zealand, men Fødevareministeriet vil følge sagen nøje.

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# Contingency Plan

For the emergence of naturally occurring BSE in Sheep  
in the United Kingdom National Flock

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# Introduction

1. This consultation document seeks views on the actions to be taken should BSE be found to be present in the United Kingdom sheep flock. The document has been prepared purely on a contingency basis. The present situation is that no BSE has been found to occur naturally in sheep. The contingency plan is part of the Government's precautionary strategy for risk management and the protection of public health. It will also serve towards meeting an obligation placed by European Union legislation on the United Kingdom and all other Member States of the European Union to draw up such plans.

## Why have a contingency plan?

2. The report of the BSE Inquiry published in October 2000 noted that the Government had been taken by surprise and wrong-footed by the announcement in March 1996 that a new variant of CJD had been identified which was probably linked to BSE. The announcement was made by the Spongiform Encephalopathy Advisory Committee (SEAC) which is an independent committee of leading experts set up to provide the Government with the best possible scientific advice on BSE and the safety of British meat. The report went on to say that the Government should have appreciated the possibility of this outcome. The report noted that there had been no consideration of any contingency plans and no interdepartmental discussions. It drew the lesson that contingency planning was a vital part of Government.
3. For its part, the Government in its interim response to the report published in February 2001 said that it recognised the importance of effective contingency planning and that Departments have a responsibility to ensure an appropriate level of preparedness. The present consultation document is evidence of the Government's commitment to implement the lessons drawn by the BSE Inquiry.
4. The need for contingency planning is also recognised at European Union level, and a recently adopted European Regulation (999/2001, article 14 and recital 14) requires Member States to draw up contingency plans specifying the measures they would implement where cases of Transmissible Spongiform Encephalopathy (TSE) diseases (that include BSE and scrapie) are confirmed, including in sheep.
5. We recognise that this has been a dreadful time for farmers and others because of the foot and mouth disease outbreak. This consultation document needs to be seen in the context of recovery from foot and mouth disease and the Government's longer-term strategy for helping United Kingdom farming to restructure in sustainable, market-orientated and environmentally responsible ways. The contingency plan will put the Government in a position of preparedness to deal effectively with a situation where BSE is found in sheep, should such a situation arise.

6. There are some fundamental differences between foot and mouth disease and BSE. Amongst those is that foot and mouth is a virus that is highly contagious and serious amongst animals but which as far as is known does not have a significant, if any, impact on human health. It is generally accepted that BSE is not a virus but rather a slowly progressive and ultimately fatal neurological disorder of adult cattle. Its transmission patterns appear to be totally different from those of foot and mouth disease. Unlike foot and mouth BSE has potentially severe implications in terms of human health.
7. One of the precautions taken with foot and mouth disease was restrictions on the use of rights of way and access to land in certain areas. This was because of the risk that the virus could be spread by humans to previously uninfected animals. Because of the differences between foot and mouth disease and BSE there is no evidence, on current knowledge, that BSE could be passed on in the same way. Therefore there would appear to be no grounds for similar concerns arising regarding the closure of the countryside should BSE be found in sheep. (The separate question of whether sheep could pick up BSE infectivity from the environment is touched on in chapter 6.2.4).
8. Chapter 3 covers the arrangements for the disposal of sheep. What is proposed is a managed disposal programme spread over several years if necessary. The phased approach would be in contrast to the disposal of carcasses because of foot and mouth disease where slaughter had to occur without undue delay. The phased approach reflects the differences between foot and mouth disease and BSE and it would benefit the environment, at least in the short to medium term, since it would allow land to continue to be grazed by sheep.

**If evidence arose that BSE might be a problem in sheep, would it not be possible simply to repeat the measures taken for cattle? Why is a new contingency plan needed?**

9. It is certainly necessary to learn lessons from what happened in the case of cattle. However sheep are not the same as cattle, and if BSE were to be found in sheep the situation would need to be handled differently in a number of ways. For example, the scientific evidence indicates that the development of infection and the distribution of BSE infectivity through the body of a genetically susceptible sheep would be more extensive than is the case with cattle. It would not therefore be possible in the case of sheep to rely solely on controls relating to specified risk material (SRM) and on the removal of animals above a certain age from the food chain. Another difference is that in the case of sheep, genotypes have been found which make the animals naturally resistant to scrapie and (so far as we know) BSE. Because of these differences it is essential to develop a separate plan for sheep.

## Contingency planning in the context of the Government's overall risk management strategy

10. Contingency planning is just one part of the Government's multi-faceted risk management strategy for sheep TSEs. The other strands are:
  - Measures to protect public health;
  - Measures to protect animal health;
  - An on-going programme of research;
  - A national scrapie plan designed to increase resistance to TSEs in, and eventually to eliminate scrapie from, the sheep flock.

### **Measures to protect public health**

11. Controls on SRM prohibit the use of certain specified animal tissues, including those from sheep and goats, which might theoretically harbour BSE infectivity. SRM controls are in place for imported sheepmeat and imported goatmeat as well as for imported beef and other products of animal origin. There are also controls on the use of vertebral columns from sheep and goats, as well as from cattle.
12. Guidelines on minimising the risk of contracting Transmissible Spongiform Encephalopathy (TSE) are in force for both human and veterinary medicinal products, including vaccines (see chapter 2). The guidelines have the force of law - from 1 March 2001 in the case of human medicines, and from 1 June 2001 in the case of veterinary medicines.
13. Under the Medical Devices Directive (93/42/EEC) the device manufacturer can demonstrate compliance with the Essential Requirements of the Directive by the application of the relevant European Standard. The assessment of conformity with the requirements for safety and quality is performed by third party organisations (Notified Bodies) and the Standard (BS EN 12442) on animal tissues utilised in medicinal devices addresses risk management, sourcing controls and validated methods of elimination or inactivation. Additional measures to further strengthen the existing regulatory controls are soon expected with the draft Commission Decision on medicinal devices. This document is relevant to the utilisation of material of bovine, ovine or caprine origin and its mandatory nature is more comprehensive than the Standard. These medicinal device manufacturers will be required to demonstrate compliance with the updated requirements next year.
14. The Government have put in place measures to reduce the theoretical risk of variant CJD being transmitted between humans. These include leucodepletion of all blood for transfusion, the use of imported plasma to manufacture blood products, single-use instruments for tonsillectomy, and a decontamination action plan for all National Health Service Trusts.

### *Measures to protect animal health*

15. A number of animal health measures are also in place. Mammalian protein is generally prohibited in any farmed livestock feed and is banned, except in tightly defined circumstances, on premises where livestock feed is used, produced or stored. Those handling mammalian meat and bone meal material are required thoroughly to clean and disinfect their premises and equipment, and to keep comprehensive records. The feed ban is monitored by extensive surveillance carried out by the State Veterinary Service and by the Veterinary Service of the Department of Agriculture and Rural Development in Northern Ireland. SRM may not be fed to any creature and mammalian meat and bone meal may not be incorporated in fertiliser for agricultural use.

### *An on-going programme of research*

16. DEFRA has a large programme of research on TSEs. Its aim is to produce the scientific information which is needed to assess the risks TSEs in farmed animals pose to human health, and to inform the policies which are aimed at protecting the public and controlling spread of disease in animals.
17. Parts of the programme have particular relevance to contingency planning. Sheep of different genotypes with known differences in susceptibility to TSEs have been fed with brain material from cattle infected with BSE. The time course of any development of disease in the tissues of these animals is being monitored. This will provide information on the age at which infectivity can be detected in tissues and whether genotypes thought to be resistant to disease carry infectivity in their tissues, even though they do not go on to develop clinical signs of disease. Information from these experiments will be of great importance if BSE is found in sheep. It will permit the safety of allowing sheep of resistant genotypes to enter the food chain to be fully assessed.
18. Food safety could also be protected if a diagnostic test were available which would allow sheep with a TSE to be identified and excluded from the food chain. In theory the test could be performed on the live animal or it could be used to screen carcasses in abattoirs.
19. Diagnostic tests used to screen carcasses and which detect the abnormal form of the prion protein have been approved by the European Commission for use in Member States' surveillance programmes. In the case of sheep these do not distinguish between the different TSEs. One of the high priority areas in the research programme is the development of a sensitive diagnostic test for detecting TSE infection in live animals.
20. In sheep BSE appears to behave like scrapie and therefore there is a theoretical possibility that it can be transmitted from sheep to sheep in the same way that scrapie can. Understanding the conditions under which scrapie can be transmitted and what the risk factors are would be important if it proved necessary to re-establish a disease-free flock in the United Kingdom. This work includes investigation of whether and to what extent infectivity can persist in the soil.

21. A programme of surveillance is also underway, one of the aims of which is to look for BSE in the national sheep flock. It has not so far been possible to sample large numbers of sheep. This is because of the probable under-reporting of scrapie, not all reported cases are suitable for testing and that the rapid biochemical methods of differentiating between BSE and scrapie have not been sufficiently well developed confidently to distinguish between BSE and some strains of scrapie. It has been necessary to use bioassay in mice to characterise the strain of TSE. This is a lengthy and expensive process which limits the number of brains that can be tested. To date about 180 scrapie brains have been inoculated into mice as part of an ongoing programme. So far none of the assays have led to a conclusion that BSE has been present. In parallel, work is progressing on the further development of biochemical methods of differentiating between BSE and scrapie. of the probable under-reporting of scrapie, not all reported cases are suitable for testing and that the rapid biochemical methods of differentiating between BSE and scrapie
22. One of the scenarios discussed in this paper envisages the possible slaughter of large numbers of sheep if BSE were found to be present in sheep. Safe disposal of infected material would be a major issue. The research programme includes studies on the inactivation of the TSE agent in different conditions.

***A national scrapie plan designed eventually to eliminate scrapie from the sheep flock***

23. DEFRA and the Agriculture Departments of the devolved administrations in Scotland and Wales have been actively developing a national scrapie plan for Great Britain. The plan will implement a recommendation from SEAC that there should be a long-term control and eradication programme for scrapie. The first phase of the plan is to be a breeding programme selecting for genetic resistance to TSEs in the pedigree part of the national flock. A public consultation on proposals for this first phase concluded on 31 October 2000. Various options were identified and these were discussed with both SEAC and the Food Standards Agency. The ram genotyping scheme, the first phase of the National Scrapie Plan, was launched on 19 July 2001. Work is also underway on developing proposals for the other phases of the scrapie plan. Priority is being given to how the national scrapie plan might be accelerated. The objectives should not only be to build up a TSE-resistant flock for the future but also to find a way of allowing some sheep to pass into the human food chain should evidence emerge from the research that BSE may have been present in sheep.
24. A somewhat similar scrapie control and eradication initiative is proposed for Northern Ireland. This will feature liaison and co-operation with the authorities in the Republic of Ireland, with the objective of controlling and eventually eliminating the disease on the island of Ireland.

### **How was the contingency plan drawn up?**

25. The plan was put together by officials from all relevant Government Departments working across Departmental boundaries and with DEFRA taking the lead. The terms of reference for the planning exercise were:

*"In agreement with all interested bodies within Government, and taking into account the European Union dimension, to produce an integrated contingency plan of the actions to be taken should the presence of BSE in sheep be confirmed and should that lead to a total or partial ban on the consumption and export of sheepmeat produced in the United Kingdom."*

### **How is the consultation exercise to be conducted?**

26. The current version of the plan is the result of an internal exercise within Government. The Government is committed to an open approach and now invites all stakeholders to provide an input into the planning process. The first priority is to ensure that what is proposed in the plan is practical and generally to make it more robust. The comments of the sheep industry and related sectors (who will be directly involved in implementation of the plan) will be particularly important in this respect. The Government regards it as essential to ensure that its plans will work in practice, and to that end it seeks and values inputs from those with expertise and experience. Comments from all stakeholders will be welcome, and the views of consumer organisations will also be vital to the future development of the plan.

### **When would the plan be implemented?**

27. The plan would come into action only if research produced results which suggested the presence of BSE in sheep. Such results would first have to be scrutinised and carefully evaluated by SEAC so as to determine their significance. Chapter 1 of the plan outlines the processes to be used by the Food Standards Agency in the lead up to their decision on the advice that they should offer to the public in the light of the research results.

28. Should the evaluation lead to the conclusion that there was BSE in the United Kingdom sheep flock, a number of immediate actions would be needed. A communications strategy would need to be activated. The European Commission and other European Union Member States would need to be involved. These matters are covered by chapter 2 of the plan. If BSE arose in sheep it is likely that there would need to be a ban on the consumption of at least some of the sheepmeat produced in the United Kingdom. It might, however, be possible to identify animals which could be consumed 'safely'. A crucial factor for this would be the availability of genotyping and/or BSE testing facilities. These issues are covered in chapter 5 of the plan.

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\* In this consultation document references to "safe" and "unsafe" should be understood in the following context: it is rarely possible in unequivocal terms to guarantee that something is in all circumstances safe. References to "safe" and "unsafe" in this document should therefore be interpreted as meaning that on that basis of best available knowledge there is either no known or perceived risk, or that any risk is not high enough not to justify advice against the consumption of a product. It is the Government's policy to be open about levels of risk.

29. A ban on the consumption of at least some United Kingdom sheepmeat would require the controlled disposal of sheep from the national flock, and that is covered by chapter 3 of the plan. To ensure that a disposal programme operated effectively an aid package would be needed (chapter 4 of the plan). Chapter 6 of the plan deals with the measures that might be put in place to re-build the sheep industry following a BSE crisis.
30. This plan should be regarded as a dynamic and living document. It will need to be kept up to date in the light of developments, for example in genotyping and testing capacity. The plan identifies a number of areas where further work is needed. The present version will be refined to reflect both the results of that further work and of the proposed consultation exercise.
31. It is not possible to predict with precision the implications of any finding related to BSE in sheep. The intention is that the contingency plan should provide a menu of actions which would allow the Government to respond flexibly and quickly to the wide variety of scenarios that might apply in the event of a crisis. Not all the actions set out in the plan would be appropriate to every scenario. Action would also need to be taken in a European Union context.
32. Market difficulties might occur as a result of concerns about public health which arise as a result of unfounded scare stories not based on any sound scientific information. That would be a different scenario to those considered in this contingency plan which assume that market difficulties would flow from advice from the FSA not to eat certain types of sheepmeat and/or a formal ban on its sale. Some aspects of the plan might nevertheless be relevant in such circumstances.



## Action and Decisions Following Emergence of Test Results

This chapter sets out the steps the Food Standards Agency would employ, following the emergence of new research results, in the process of deciding whether the Agency's existing advice to consumers and Ministers concerning the safety of sheepmeat needs to be changed.

The hypothesis on which this contingency plan is based is that at any time new research results could appear which might have significant implications for the Agency's current advice on sheepmeat. Such results could come from a variety of sources and might or might not lead to an immediate decision that BSE had been found in sheep.

If the results were to come from a known experiment, for which the criteria for a positive result for BSE had been pre-determined, it might be possible to state on receipt of a result which met those criteria that it was a finding of BSE in sheep. In those particular circumstances there would be no need to seek further scientific advice in order to confirm the positive result. The Agency would then advise Ministers as to its new advice to consumers on the safety of sheepmeat, what further measures to protect consumers should be taken and whether any further testing or research was needed in order to provide a more reliable basis on which to take decisions. In formulating its advice, the Agency would take into account the current scientific knowledge and all other relevant factors, which might at that time affect the safety of sheepmeat.

In all other circumstances, that is, where test results could give rise to increased concern about the possibility of BSE in sheep but could not be considered immediately definitive, SEAC advice would first be required on the significance of the results in relation to the question of whether or not BSE may be present in sheep. If the presence of BSE in sheep were confirmed or, if not, SEAC considered that the results would nevertheless make the presence of BSE in UK sheep more likely, the Agency would at the same time seek SEAC's advice on the implications for consumer safety. The Agency would then, on the basis of the SEAC advice, advise Ministers as set out in paragraph 1.1.3 above.

*The Agency would welcome comments on the steps it proposes to employ, as set out above, in deciding whether its existing advice needs to be changed.*

## Immediate Action Following the Onset of a BSE Crisis in Sheep

### Introduction

31. If BSE is found to occur in sheep, immediate action will be needed to protect human and animal health. This will include action to ensure that no "unsafe" sheepmeat enters the human food chain, and to recall sheepmeat, sheep products and sheep-derived products which are deemed to pose a threat and which are already in the system at the date a crisis emerges. The recall arrangements might need to include a buy-back scheme and a stocks disposal scheme of the kind that were put in place for cattle. Further work is needed on the detail of such schemes, including who should run them.

This chapter of the plan considers these issues. It also deals with the communications strategy that would need to be activated immediately if a crisis arises. Finally, the chapter deals with the European Union dimension and import and export controls.

### Section A: Protection of human and animal health

#### *The Human Food Chain*

Research on experimentally infected sheep indicates that the BSE agent is more widely distributed in the bodies of genetically susceptible sheep than it is in BSE-affected cattle and that it would be virtually impossible to separate all potentially infected tissue from the meat. For that reason, it would not be possible, as in cattle, to remove the large majority of any potentially infective tissue by SRM-type controls. Therefore, at the present state of knowledge, if BSE were shown to be present in the national flock, the Food Standards Agency would have little option but to advise that only sheep which could be clearly demonstrated to be free of BSE could be allowed to remain in the food chain. It is also likely that the Agency would have to advise against consumption of goat meat (as goats are susceptible to BSE) and sheep and goat milk and dairy products.<sup>1</sup>

In the event of finding BSE it might also be possible to allow some sheepmeat into the food chain based on its genotype. This would depend on progress in areas such as breeding for genetic resistance to TSEs and traceability. Another, longer term possibility would be to screen sheep using a diagnostic test. All such factors would be taken into account if and when a decision in relation to a finding of BSE in sheep had to be taken.

In the event that a ban on consumption of at least some United Kingdom sheepmeat became necessary, then potentially unsafe products already in the human

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• <sup>1</sup> \* There is no advice against consumption of milk and dairy products in the case of cattle. This reflects the fact that in sheep and goats infected with scrapie and (experimentally) with BSE, infection is more widely distributed through the body than in BSE-infected cattle. Experiments in which mice were fed or were inoculated with milk and udder tissue from cattle failed to demonstrate disease transmission. Milk from suspect BSE cases in cattle is not allowed for use for human consumption.

food chain would presumably need to be traced and withdrawn. The information currently available would suggest that sheep or goat material is not used in nearly such a wide range of food products as that in which beef derivatives may be used. In relation to sheep meat usage, from figures provided by the Meat and Livestock Commission, about 75 per cent is sold as fresh or frozen meat (of which two thirds - or 50 per cent of total sheep meat usage - is sold retail and one third - 25 per cent of the total - for catering). The remaining 25 per cent is sold processed (20 per cent retail plus 5 per cent for catering), in products such as curries, meat pies and shepherd's pies. In addition, sheep intestines are used to produce sausage casings. A limited amount of sheep meat also goes into pet food.

The Food Standards Agency has commissioned two research projects to assess the risk to humans were BSE present in sheep. One is a short-term project of an expected duration of 6-9 months. One of the objectives of the project is to identify how the carcasses of lambs and ewes slaughtered for human consumption are utilised. The results of this work will assist in defining the categories of food product which may contain sheep material and may need to be withdrawn in the event that the Agency advises that at least some United Kingdom sheepmeat may no longer safely be consumed.

*The Agency would welcome views on the actions proposed for the human food chain and suggestions about further action that might be taken.*

#### **Human and Veterinary Medicinal Products**

There is no known alternative to the use of some substances of animal origin in the manufacture of medicinal products. A single, unified, set of guidelines on minimising the risk of transmitting TSEs are in force for both human and veterinary medicinal products. The guidelines apply at European Union level. Under European Union Directives all new applications for marketing authorisations, in the case of human medicinal products from 1 July 2000 and in the case of veterinary medicinal products from 1 October 2000, must be demonstrated to comply with the guidelines. All existing medicinal products must comply in the case of human medicinal products by 1 March 2001 and in the case of veterinary medicinal products by 1 June 2001. Guidelines to industry on sourcing and processing of materials derived from ruminants such as cattle, sheep and goats used in the manufacture of medicinal products for human use have been in place in the United Kingdom for some years.

The guidelines cover matters relating to the source of animals, the nature of animal tissue used in the manufacture of medicinal products and the production processes. A key feature of both sets of guidelines is that ovine or caprine material specified in the guidelines and intended for use in medicinal products should not be sourced from countries where there is a high incidence of BSE. It is highly unlikely that any human or veterinary medicinal product currently available, or about to become available, in the United Kingdom would contain products specified in the guidelines that had been sourced from United Kingdom sheep or goats. Where, for example, ovine material that falls within the scope of the guidelines is still used in veterinary products in the United Kingdom it is almost always sourced from New Zealand. From the relevant dates the Government will have in-

formation on the source of ruminant materials used in the manufacture of medicines that are covered by the guidelines. It is of course possible that, in the event of BSE being found in sheep, countries currently regarded as "safe" sources might no longer be so regarded.

Not all ovine and caprine products come within the scope of the guidelines. Under the unified set of guidelines milk and milk derivatives, and derivatives of hair and wool, are excluded although there are special provisions which effectively include milk in certain circumstances in the case of human and veterinary medicinal products. Where products outside the scope are used to make a starting material for the subsequent production of medicinal products, information about the use of the products could only be obtained by contacting holders of marketing authorisations.

In the event of BSE being found in sheep, the information available to the Government from 1 March and 1 June 2001 should be sufficient to identify which human and veterinary medicinal products containing the sheep or goat products specified in the guidelines needed to be recalled in the light of the new information that gave rise to the crisis. There could be a problem, however, if the crisis called into question the safety of products not covered by the guidelines. Information about their use would not always be available to the Government. It would be possible, in advance of any crisis and on a contingency basis, to ask marketing authorisation holders and applicants voluntarily to disclose to the Government - or as an alternative to keep a readily accessible register of - information about any sheep and goat products not covered by the guidelines which are being used in medicinal products. This could be done as part of the compliance exercise under the European Union Directives (see paragraph 2.2.6 above).

*The Government would welcome views on this and on any other actions that might be taken on a contingency basis. The Government intends to seek the views of SEAC on whether they consider it possible that a future development on the BSE front might lead to a conclusion that one or more of the products currently excluded from the guidelines could pose a threat to human or animal health by being included in medicinal products.*

### **Other Uses of Sheep- and Goat- Derived Products**

Experience of BSE in cattle suggests that there will be a number of fairly obscure uses of ovine/caprine material which could only be uncovered by a thorough audit, starting at the bottom of the supply chain. With the help of the Department of Industry, the list below has been put together. It does not claim to be exhaustive as it was compiled without consultation of those outside Government. The list indicates that a full audit would be a fairly extensive exercise. As a starting point, it would be reasonable to assume that the full range of uses is likely to be as extensive as for cattle, and in the case of cattle the BSE Inquiry report criticised MAFF for not having undertaken an audit of the uses of bovine material when BSE first emerged.

## **(a) Fertilisers**

A preliminary examination suggests that, if a BSE problem arose for sheep, the main issue as far as the safety of fertilisers is concerned would relate to organic fertilisers containing only one major nutrient. Fertilisers containing only one major nutrient fall outside the scope of the relevant regulations, and as a result information is not always available on what they contain. Some fertilisers are known to contain sheep-derived products. There is currently an explosion of organic fertilisers on the market, for use for example in domestic gardens, and they are not subject to approval or registration procedures.

## **(b) Cosmetics and toiletries**

There are estimated to be about 265 cosmetics manufacturers in the United Kingdom. There is currently relatively little information within Government about the source of the ovine or caprine products they use. However, there is some information which suggests that, apart from tallow, little use is now made in the United Kingdom of animal material in the manufacture of cosmetics. Cosmetic products are regulated by the Cosmetic Products (Safety) Regulations 1996. Directive 98/16/EC prohibited the use in cosmetic products of certain materials from bovine, ovine and caprine animals. It also included new controls on the manufacture of tallow derivatives. The Directive was implemented by SI 1998 No. 1727 on 16 July 1998. The Regulations are enforced by Local Authority Trading Standards Departments or District Councils.

## **(c) Leather and related products from sheep/goats**

All the following are classified as industrial raw materials, with the exception of chamois leather, which is a retail product. The upstream supply chain usage of these products is extensive:

- Nappa (grain) leather (mainly clothing)
- Suede leather
- Chamois leather
- Wool-on sheepskins (clothing, gloving, rugskins, seat covers etc)
- "Pickled" pelts (the raw material after wool has been removed from sheepskins by chemical processes)
- "Slink skins" (produced from stillborn and perinatal lambs, for gloving footwear and clothing use)
- Pickled grains/finished skins (desk tops, leather goods)
- Leather for leather goods and footwear derived from goat carcasses.

Figures from the British Leather Confederation suggest that there are 50 tanneries altogether in the United Kingdom. Only one or two are thought to deal in caprine leather. It is likely that tanneries deal either in cattle hides or sheepskins, although information is not available on the split between them.

### **(d) Laboratory usage**

Sheep carcasses are used in veterinary schools for dissection and teaching purposes. It is possible that sheep carcasses may also be used in other educational institutions for teaching or research purposes. Live sheep can be used for antibody production, and proteins for medical purposes are derived from the milk of transgenic sheep, goats and cattle.

### **(e) Other uses**

It is likely that ovine material is used for many of the purposes which were identified for bovine material such as glues, greases and lubricants.

### **A full audit of the use of sheep- and goat derived products outside the human food chain?**

As stated above, it would take a full audit to uncover all the uses of sheep- and goat- derived products and such an audit would be labour intensive. It would be important that it be adequately resourced. The Government intends to undertake such an audit. The Government also intends to ask SEAC whether they have any views on the relative risks that would be posed to human and animal health by the different types of products in which sheep and goat material is used, should there be a BSE crisis involving sheep. That would allow particular attention to be paid to any products that SEAC thought might pose risks should a crisis arise.

*The Government would welcome views on any other actions that might be taken on a contingency basis in relation to these sheep- and goat- derived products outside the human food chain.*

## Section B: Communications strategy

One of the important actions following the emergence of a BSE crisis would be the activation of a communications strategy. An important principle underlying the strategy would be that it should operate on a United Kingdom basis, and should involve all interested parties both inside and outside Government.

The Government has drawn up plans for internal communications within Government should a BSE crisis arise in sheep. It has also drawn up plans for involving the European Commission and partners in other Member States. The Government would also wish urgently to brief consumer, industry, and trade groups together with representatives of the health sector, when a Ministerial announcement is made about BSE and sheep, should such an announcement prove necessary.

*The Government would welcome any suggestions for additions or amendments to the following lists of bodies it would propose to brief:*

### England

- Association of British Abattoir Operators
- Association of British Pharmaceutical Industry
- Association for Science Education
- British Association of Sheep Exporters
- British Generic Manufacturers Association
- British Goat Society
- British Leather Confederation
- British Meat Federation
- British Meat Manufacturers Association
- British Organic Farmers
- British Retail Consortium
- British Wool Marketing Board
- Chartered Institute of Environmental Health
- Consumers Association
- Consumers in the European Union Group
- Country Landowners Association
- Farm Animal Welfare Council
- Farm Livestock Advisory Group
- Freight Transport Association
- Goat Advisory Bureau
- Goat Producers Association
- Livestock Auctioneers Association
- Local Authority Co-ordination Body on Food and Trading Standards
- Local Government Association
- Meat Hygiene Service
- Meat and Livestock Commission
- Minerals and Waste Topic Group of the Planning Officers Society
- National Consumer Council
- National Federation of Consumer Groups
- National Federation of Meat and Food Traders
- National Farmers Union

- National Office of Animal Health
- National Sheep Association
- Proprietary Association of Great Britain
- Royal Agricultural Society of England
- Royal Society
- Scrapie Information Group
- Skin, Hide and Leather Traders Association
- Small Abattoir Federation
- Tenant Farmers Association
- United Kingdom Renderers Association
- Womens Farming Union

## Scotland

- National Sheep Association (Scottish Branch)
- Shetland Flock Book Society
- Royal Veterinary College
- Scottish Agricultural College
- British Veterinary Association (Scottish Branch)
- Convention of Scottish Local Authorities
- Crofters Commission
- Scottish Crofters Union
- Shetland Agricultural Association
- Highlands & Islands Livestock Ltd
- National Farmer's Union of Scotland
- Scottish Society for the Prevention of Cruelty to Animals
- Institute of Auctioneers and Appraisers In Scotland
- The Rowett Research Institute
- Institute of Animal Physiology & Genetic Research
- Scottish Federation of Meat Traders Association
- Scottish Association of Meat Wholesalers
- Scottish Quality Beef & Lamb Association
- Scottish Landowners Federation
- The Royal Environmental Health Institute of Scotland
- Health and Safety Executive
- Scotch Halfbred Sheep Breeders Association
- Scottish Consumer Council
- Scottish Food & Drink Federation
- Sheep Veterinary Society
- Shetland Sheep Society
- The Society of Border Leicester Sheep Breeders
- Scottish Greyface
- Scotch Mule Association
- Shetland-Cheviot Marketing Society
- Highlands & Islands Sheep Strategy
- Scottish Environment Protection Agency
- Scottish Retail Consortium
- The Royal Society of Edinburgh
- Shetland Fish Products Ltd
- McIntosh Donald Ltd

- United Fish Products Ltd
- William Forrest & Sons
- Dundas Chemical Co Ltd
- Dundas Brothers Ltd
- R McCulloch Ltd
- S & C Murphy
- Grayshill Knackery
- S B & Co
- Sacone Industries Ltd
- Hamilton (Irvine) Ltd
- Road Haulage Association (Scotland)
- Quality Meat Scotland
- Western Isles Council
- University of Glasgow Veterinary School
- British Society of Animal Protection
- Women's Farming Union
- The Rural Centre
- Moredun Research Centre
- Aberdeen Consumers Group
- Food Industry Forum
- Scottish Consumers Association For Natural Food
- Scottish Borders Enterprise
- Sheep Veterinary Association
- Scottish Agricultural Organisation Society
- Shetland Animal Health Trust
- Directors of Public Health
- Chief Executives Health Boards
- Royal Colleges
- Directors of Environmental Health
- Department of Public Health, University of Aberdeen
- Department of Public Health, University of Dundee
- Department of Public Health, University of Edinburgh
- Department of Public Health, University of Glasgow
- Scottish Centre for Infection and Environmental Health
- Public Health Institute for Scotland
- Institute for Animal Health Neuropathogenesis Unit
- CJD Surveillance Unit

## Wales

- Country Landowners Association
- Countryside Council for Wales
- Farmers' Union of Wales
- Guild of Welsh lamb and beef
- National Farmers' Union
- National Sheep Association
- Royal Welsh Agricultural Society
- Welsh Consumer Council
- Welsh Local Government Association

- Welsh sheep breed societies
- Young Farmers' Clubs
- [Further public health contacts may be added]

## Northern Ireland

- DAFRD Dublin – agree line on exports/imports.
- General Consumer Council (NI).
- LMC.
- NI Livestock Auctioneers Association.
- NI Meat Exporters' Association.
- Relevant industry bodies. (See Below.)
- Ulster Farmers' Union.

## Sheep & Goat Societies

- NI Bleu du Maine Club
- Ulster Ram Breeders' Association
- NI Bluefaced Leicester Sheep Breeders' Association
- Ulster Vendeen Sheep Breeders' Club
- British Charollais Sheep Society Ltd (Northern Region)
- NI Dorset Sheep Breeders' Club
- Hampshire Down Sheep Breeders' Association of Ireland
- NI Ile de France Club
- NI Cheviot Sheep Breeders' Club
- NI Rouge De L'Ouest Club
- Suffolk Sheep Society (NI Branch)
- NI Texel Sheep Breeders' Club
- Irish Beltex Sheep Breeders' Society
- Irish Vendeen Sheep Breeders' Club
- NI Goat Club
- National Sheep Association (NI)

### Section C: European Union dimensions, and import and export controls in the event of a crisis

The European Commission is aware of the contingency planning exercise, and discussions have taken place with them about the details of the plan. The Commission is itself giving thought to contingency planning, and Member States are obliged under a Council and European Parliament Regulation to draw up contingency plans for new TSE outbreaks specifying the national measures to be implemented and indicating competences and responsibilities. Many aspects of the plan (notably the aid package) would be capable of implementation only with the agreement of the Commission. Moreover, developments since the start of the contingency planning exercise have made it look ever more likely that, if a BSE crisis arose, the United Kingdom would not be the only Member State affected. Union-wide measures are therefore likely in the event of a crisis, and the United Kingdom would not have total control on the form those would take. The proposals in this plan could however serve as an input to the Commission's and broader European Union thinking. It has to be recognised that what may emerge at Union level may not be the same as what is set out here. Much would depend on how far the Commission are prepared to go in preparing a Union-wide plan.

The United Kingdom has opened bilateral contacts with some other Member States about the plan, and with the Republic of Ireland on land border issues. It is possible that a BSE crisis in sheep might be activated by developments in another Member State rather than in the United Kingdom. This plan could remain relevant in such a situation.

*The Government would welcome suggestions on any further action that might be taken on a European level, or on any other aspects of the European dimension that should be taken into account in the planning exercise*

32. Experience with cattle indicates that increased checks would be required to ensure that any ban imposed, following a crisis, on the export of United Kingdom sheep was watertight. (At the moment, as a result of foot and mouth disease, an export ban is in place in Great Britain with effect from 21 February 2001). Increased checks would also be needed to ensure that any exports that were allowed to continue complied with the requirements that allowed sheepmeat to be deemed "safe". As far as imports are concerned, the controls would depend on the nature of the crisis. If a crisis was confined to the United Kingdom, it would probably not be appropriate or possible to introduce import controls. A difficult situation could arise if in the United Kingdom's view the evidence suggested that the likelihood of BSE in sheep was not confined to us, but if that view was not shared by the Commission and other Member States. That possibility perhaps looks increasingly unlikely. If the crisis were Union-wide there would need to be checks to ensure that imports (whether from other Member States or from third countries) met whatever requirements were in place to determine the safety of sheep.

*The Government would welcome comments on aspects relating to imports and exports, particularly on the practicalities of operating controls.*

## **Slaughter and Disposal Programme**

### **if it becomes necessary to slaughter at least part of the United Kingdom flock**

#### **Introduction**

This chapter covers the arrangements for the disposal of sheep under a Government-controlled slaughter programme. There are a number of possible circumstances in which such a programme might be necessary, and the proportion of the flock subject to the programme would vary according to those circumstances. The analysis in this chapter concentrates on what would need to be done if sheepmeat and sheep products are concluded to be at risk and are excluded from the food chain. What is proposed is capable of adaptation to a range of situations where a disposal programme is considered necessary. In particular it would be capable of adaptation if it proved possible to segregate "safe" sheep from infected or potentially infected sheep, so that the "safe" sheep could continue to pass into human consumption. In such a circumstance the disposal programme would only be applicable to that part of the flock considered to be infected or potentially infected.

#### **Intermediate steps**

A decision to initiate a disposal programme for at least part of the sheep flock would be a major one which could not be taken lightly. Such a decision would have wide-reaching consequences, including environmental ones, if particular areas were no longer grazed by sheep. Before moving to it the Government, in consultation with interested parties including the European Commission, would fully consider intermediate options such as:

- The possibility of using diagnostic testing for BSE and/or genotyping to identify sheep that could continue to be allowed into the human food chain;
- The possibility of extending SRM controls;
- The possibility of limiting the problem to particular areas or particular flocks within the United Kingdom or within the European Union, for example by imposing controls on movement and by slaughter of flocks identified as infected or as having been in contact with infected animals;
- Strict controls over the disposal of potentially infected sheep.

*These issues are explored further in other parts of this document in particular chapter 5. The Government would, however, welcome any suggestions for further intermediate steps that might be effective in the early stages of any BSE problem in limiting the scale of the problem.*

#### **The worst case scenario**

As already stated it is not by any means inevitable that a disposal programme would need to cover the entire United Kingdom flock. However, for planning purposes we have looked at the consequences should that happen.

If the consumption of United Kingdom sheepmeat was completely prohibited following confirmation of the presence of BSE, it would be necessary to dispose not just of the meat from normal slaughterings (for which there would be no market outlet) but also that from the breeding flock and from animals that would normally be exported live. It would in addition be necessary to dispose of large quantities of offals/waste from those animals, since outlets in human consumption, animal feed and petfood would be closed off. Although in theory an industrial outlet could be contemplated for tallow, pelts and fleeces, the very significant increase in the amounts must make commercial disposal unlikely.

The foot and mouth outbreak has caused very significant disruption to the United Kingdom sheep industry, and large numbers of sheep have had to be slaughtered as a result of the disease. It will take some time for the industry to rebuild itself.

This creates some uncertainty as to the quantities that would require disposal.

However, for the purpose of this consultation document pre-foot and mouth disease statistics have been used. These suggest that, if all the sheep normally slaughtered and exported together with the breeding flock, had to be disposed of by special measures following confirmation of BSE, the number of animals requiring slaughter, on a United Kingdom and on an annual basis, would rise from about 19 million to about 40 million - an increase of well over 100 per cent.

A total of some 2 million tonnes of United Kingdom meat product (excluding fleece and pelts) would lose their current market outlets and would require special disposal. Industrial disposal of fleece and pelts seems unlikely, so about 180,000 tonnes of that would require special disposal.

### **Would it really be as bad as that?**

These are annual figures and, assuming it were possible to put an end to further breeding at the point BSE was confirmed, represent the worst possible outcome. It is worth noting, however, that if breeding continued the position could be worse than indicated by those figures since more than one year's lamb crop might require special disposal. It follows that the special measures following any confirmation of BSE would need to include measures that resulted in a discontinuation of further breeding, except insofar as that could be justified by developments in the sphere of genotyping or BSE testing. (See chapter 5.)

Assuming controls on breeding, the position would probably approach being as bad as suggested by the above figures only if BSE were confirmed in the spring, before normal commercial slaughterings of the new lamb crop had begun. At other points in the year some of the year's crop will already have been slaughtered. Even then, however, not all of the slaughtered product will have been disposed of at the point of confirmation of BSE, and it would be necessary to retrieve that product - by way of a buy-back scheme and a stocks disposal scheme - to ensure that it did not go for human consumption. To the extent that any such product had already been processed, that might reduce storage problems upon retrieval. If a BSE confirmation occurred in the period around November to January the number of lambs on farm would be at their lowest. It is unlikely, however, that a disposal programme could be completed before all, or even the majority, of the ewes who would then be pregnant had given birth.

The Government intends to commission a formal modelling project from operational researchers who will be asked to look, on a United Kingdom basis, at all the variables likely to affect the disposal programme.

*The Government would welcome comments on the analysis in the preceding paragraphs of the scale of the disposal exercise that might be necessary, and any suggestions for further action that might be taken to refine the analysis.*

### **Managing the disposal programme**

If faced with a product that had no market value, it is possible that a producer's instinct would be to dispose of that product as quickly as possible to avoid further nugatory expenditure, for example on feed. Unlike cattle slaughtered under the Over Thirty Month Slaughter (OTMS) scheme, retention of sheep would not provide the farmer with any significant marketable by-products. Even if slaughtering and disposal capacity were increased, it would be unlikely to be able to cope with unmanaged disposal arrangements which left it to the farmer to decide when to dispose of his animals. In order to prevent further breeding, the cull program should (subject to the points made in Chapter 5) first take out rams. Account would then need to be taken of the age of animals so as to minimise the number of casualty animals dying on the farm prior to slaughter. Another priority could be lambs reared on hill farms as stores or ewe lambs for breeding. There would no longer be a market for these, but their farms of origin would not have adequate feed to over winter them and they would have to be disposed of on welfare grounds on the approach of winter, if appropriate. That approach to the ordering of a slaughter programme would be valid on a United Kingdom wide basis, and it would result in an across the board thinning out of the United Kingdom flock. That would reduce stocking density and help on the animal welfare front, given that animals would be retained on farm for longer than is the case under normal conditions.

This leads to the conclusion that the Government will need powers to manage the disposal programme in a way which allows it to direct individual farmers about when they should dispose of their sheep, and in what order. The legislation would need to be on a consistent basis throughout the United Kingdom, but separate legislation would be needed in each of the devolved administrations.

*The Government thinks it would be right to draft the necessary legislation on a contingency basis.*

There is a clear link with the aid package it is proposed elsewhere in this plan (see chapter 4) that the Government should make available. It is desirable to ensure that the farmer pays proper regard to the welfare of sheep while they remain on farm awaiting disposal. One option would be to make aid dependent upon the farmer presenting animals for aid in a "fit" condition. Aid at slaughter could also be made dependent upon the correct type of animal being presented at the correct time, and upon the animal being otherwise (that is, apart from the BSE risk) fit for human consumption.

*The Government would welcome comments on these proposals.*

*In summary, the Government seeks views on the proposal that the following should be the key features of the management of a disposal scheme:*

- Government powers to direct when a producer presented animals for slaughter, and in what order;
- any Government aid to take account of need for orderly disposal and need to encourage maintenance of welfare standards in the case of animals on farm awaiting disposal;
- increase in inspections under animal welfare regulations of farms with animals awaiting disposal.
- the speed of the disposal programme.

33. A number of considerations are relevant :

If BSE is confirmed there is an argument that the national flock, or the infected part of the national flock, should be destroyed speedily to remove potentially dangerous animals whose consumption would pose a danger to human health and whose continued presence on the landscape might be seen as a continuing source of infectivity. While recognising those potential concerns, it is important to balance them against the practicalities of a disposal operation.

It would be difficult to justify significant levels of financial investment either directly by the State, or by the private sector with State subvention, to produce spare disposal capacity, purely against a contingency that might never materialise. This argues for spreading the cull, if possible, over a period that corresponds with available disposal capacity and/or over such period as might allow necessary extra capacity to come on stream following confirmation of BSE.

The period over which a cull might be spread would be constrained by welfare considerations, but provided there were sufficient measures to safeguard the welfare of animals retained on farm pending disposal, there would seem to be no reason why the cull should not be spread over several years if necessary.

Spreading the cull over several years could have some positive, although possibly short-term, environmental impact since it would allow land to continue to be grazed by sheep. There would still be a need to at least start work considering the future of the countryside in environmental terms with a reduced national flock.

If the cull were to be spread over a period of years, it would be necessary over that period to keep meat from infected animals out of the food chain. That would be done by replicating the type of controls in place for OTMS, in particular the treatment, including staining, of the meat after slaughter to render it unsuitable for the food chain.

*The Government would welcome views on the proposal that a disposal programme could be spread over a number of years if necessary.*

### **Slaughtering arrangements**

On-farm slaughter of sheep on the scale necessary (which would potentially be much higher than in the recent foot and mouth disease outbreak) does not appear to be a realistic option. There would be health, environmental and practical problems. (These would be of a different nature to those that arose for foot and mouth disease, due to the differences between the two diseases – see paragraph 6 of the Introduction.) Slaughter would therefore take place at abattoirs. There would, however, need to be arrangements for the on-farm slaughter, collection and incin-

eration of casualty animals in the same way as currently operates under the OTMS, as well as collection facilities for fallen stock.

Slaughtering capacity at abattoirs might be needed for as many as 40 million sheep. If this were to be carried out evenly over 4 years, this would mean 10 million sheep per year, or around 200,000 per week. (At 350 sheep per vehicle, this would indicate around 600 lorry deliveries per week under normal conditions.) This should be compared with the 20 million or so sheep - mainly lambs - slaughtered annually at present.

It is envisaged that, unlike the OTMS where producers are able to present their cattle into the scheme whenever they like, under a sheep disposal scheme farmers would be directed to present their sheep to a specific abattoir on a specified date. This would enable an orderly disposal of the affected animals, and would allow for a structured approach. Apart from this, however, a sheep disposal scheme would run more or less along the lines of the OTMS, with abattoirs at dedicated times doing nothing other than sheep disposal slaughtering and with similar procedures and scheme controls. Specific abattoirs would be approved under the disposal scheme and would be chosen in order to provide adequate coverage for the whole of the United Kingdom. There would need to be a greater number of abattoirs/greater capacity in those areas where the sheep population is highest. Under the OTMS, prior to foot and mouth disease, there were 21 abattoirs covering the United Kingdom, but the number which might operate under a sheep disposal scheme would depend on such considerations as location and throughput.

It is thought that the number would be at least the same as under the OTMS, probably higher. The use of the slaughtering capacity would be constrained by the availability of rendering capacity to deal with the resultant material. Abattoir contracts would be awarded on the basis of a competitive tender.

*The Government would welcome views, particularly from representatives of the slaughtering industry, on whether the total necessary abattoir capacity would be available.*

As a next stage in the planning exercise the Government sees merit in opening discussions with the industry with a view to discussing tenders, in advance of any crisis and on a contingency basis, for the abattoir capacity that might be needed. The results of that tendering process would allow any problems requiring further work to be identified. For example, there might be capacity problems at regional or local level and these would need to be addressed to minimise lengthy journey times for animals.

*The Government would welcome comments on the proposal to discuss tenders on a contingency basis.*

It would be necessary to amend legislation, in a similar fashion as was done for OTMS, to allow sheep slaughtered as part of a cull to be slaughtered in a licensed abattoir if they are intended for food consumption. (The Government thinks it would be right to draft the necessary legislation on a contingency basis so that it could be laid quickly if necessary.

*The Government would welcome comments on this proposal.*

## Direct incineration of the whole carcase after slaughter

Under normal market conditions the majority of the sheep product which does not find a direct outlet in human consumption or petfood goes for rendering. Most of the bovine product under OTMS is disposed of through the rendering route. At first sight an alternative disposal route might appear more attractive in the case of sheep, namely direct incineration of the whole carcase (including pelt and fleece) after slaughter. Intervention Board figures suggest that the capacity for direct incineration is about 104,000 tonnes per annum, and that most of that is already utilised on OTMS and fallen stock. Existing capacity is well below that likely to be required for sheep, even if the cull is spread over several years. Construction of new incineration facilities, and even the conversion of existing facilities, takes time. So too do the obtaining of the necessary planning consents and environmental approvals. Such developments are subject to mandatory EU requirements that the need for an Environmental Statement be considered. In most cases involving the incineration of this material such a Statement will be required and is mandatory for hazardous waste and plants with a capacity exceeding 100 tonnes per day. Even if funding could be found, it seems unrealistic to expect that new facilities could be brought on stream in less than two to three years. This means that even if a decision were taken now to expand direct incineration capacity, it is unlikely that the resulting increase would be available at the point BSE was confirmed. To deal with foot and mouth disease, about nine mobile incinerators were brought into the United Kingdom. These mobile incinerators would be unlikely to have any significant impact on the direct incineration capacity available for whole sheep carcasses should BSE be found in sheep. There is in any case some doubt as to whether environmental approvals and licenses would be issued for the use of these incinerators in such circumstances. Mobile plant intended for 'temporary' use requires normal planning permission if it is to be used for more than 28 days in any 12 month period at the same location and, hence, also requires consideration of the need for an Environmental Statement.

Carcasses intended for direct incineration, but which in the meantime had to be stored because of capacity constraints, would have to be kept in cold storage. (Carcasses would probably need to be stored on a dressed carcase basis with other parts, such as offals, being removed and disposed of separately.) Indications are that, at maximum, about 100,000 tonnes of cold storage would at the moment be available in the United Kingdom for a sheep cull. Most of that would need to be rented from the private sector. Even if the cull were spread over four years, the level of capacity currently available would be far from adequate. More cold storage capacity would therefore be needed. Putting extra capacity in place would be expensive and would take time.

Incineration facilities for whole sheep carcasses would be needed in the case of casualty and fallen animals. The Government intends to put further work in hand to assess whether these facilities could be obtained by extending existing Intervention Board contracts, or whether other action is needed. A recent development in the arrangements for dealing with fallen cattle will mean that as from July 2001 the

surplus incineration capacity currently available to the Intervention Board under the OTMS will be taken up.

The above analysis suggests that the route of placing major reliance on direct incineration after slaughter is unlikely to be attractive on grounds of practicality and cost and the need for land use planning and environmental consents.

*The Government would welcome comments on the analysis.*

### **The rendering route**

Some of the material that makes up the total of 2 million tonnes that might require disposal as part of a sheep cull is already rendered. It is difficult to obtain a definitive figure for the amount, but it is likely to be of the order of 230,000 tonnes per annum. Informal estimates by the Intervention Board suggest spare annual rendering capacity may be up to 260,000 tonnes per annum. In addition to this there is surplus capacity within OTMS rendering facilities for around 8-9 months of the year. Calls have been made on this capacity by the need to deal with animals culled in the foot and mouth disease outbreak; however, this requirement will reduce and fall away as long as the frequency of cases continues to decline. Optimisation of spare capacity would require co-operation within the United Kingdom rendering industry. However, it appears likely that there would be enough rendering capacity provided the cull was spread over a number of years (possibly as many as four years), and provided the Government assumed control of the disposal flow so as to make it match the available rendering capacity. The latter point is important since otherwise material would require cold storage after slaughter while it awaited rendering, significantly increasing costs. It would appear desirable to programme the cull so that the peak activity period under the sheep disposal scheme occurred during the spring and summer months, while the OTMS is quieter.

Unless they continued to be marketable and were considered to pose no threat to health, fleeces and hides should be removed prior to rendering and subsequently be disposed of by incineration, subject to obtaining the necessary environmental consents. If it were possible to remove fleeces, hides and stomach contents, that would work towards maximisation of rendering capacity.

*The Government would welcome views, particularly from representatives of the rendering industry, on the assessment of available rendering capacity set out above.*

*The Government considers that there might be a case for opening discussions with the rendering industry with a view to discussing tenders, in advance of any crisis and on a contingency basis, for the rendering facilities that might be needed.*

*The Government would welcome comments on this and on the question of whether, in the event of a large-scale sheep disposal scheme, the level of surplus capacity available would be such as to produce real competition in the rendering sector.*

## Incineration of the products of rendering

Rendering 2 million tonnes of raw material would produce some 525,000 tonnes of meat and bone meal, and some 420,000 tonnes of tallow. A significant percentage of the tallow could probably be incinerated by the renderers with energy recovery to fuel their process, as happens now under OTMS. That would minimise any amounts of tallow that might have to be taken into store. Storage of tallow should not give rise to major problems. Environmental consents would be needed, as would planning consents if existing storage facilities could not be used or converted within existing permitted development rights.

*The Government would, however, be grateful for the views of the rendering industry on these matters.*

Disposal of the meat and bone meal would almost certainly need to be by incineration. Intervention Board figures suggest that incineration capacity for meat and bone meal is just over 200,000 tonnes per annum as at spring 2001. The evidence suggests that it would take a period of at least two years to develop and bring into operation new facilities that met the required standards. There is currently no surplus capacity within the United Kingdom, and all existing capacity is under contract to the Intervention Board for the purpose of incinerating meat and bone meal under the OTMS. The three contracts currently in existence have a further two to three years to run. It is envisaged that around 60 per cent of OTMS meat and bone meal stocks will have been incinerated by March 2002 and that the Board will be incinerating only new OTMS meal by the end of 2004.

There may be scope for extending the existing contracts so as to facilitate incineration of meat and bone meal arising from a sheep disposal scheme should one occur. Amendments to planning, operating and environmental consents would need to be sought as they currently cover only meal under the OTMS. The Government intends, on a contingency basis and in advance of any crisis, to examine whether contracts and consents could be renegotiated in this way.

*The Government invites comments on its estimates of the incineration capacity available, on the action it intends to take on contracts and consents, and on any other action that might be taken.*

## Storage of meat and bone meal

The 525,000 tonnes of meat and bone meal that would be produced under the worst case scenario of a disposal scheme for the entire sheep flock would need to be stored pending incineration. Storage of meat and bone meal does not require cold storage facilities.

The Intervention Board has found it increasingly difficult to obtain commercial storage facilities under the OTMS in England. A significant volume of such storage can no longer be found at short notice and reasonable cost. The Government therefore intends to pursue the possibilities identified below, on a contingency basis in advance of any crisis, including where appropriate agreement on draft contracts and the obtaining of planning and other consents, so that the facilities can be brought into use as quickly as possible should the need arise. The Government

will continue to adopt the consultative approach with local interests hitherto adopted.

Waste meat and bone meal would be stored under a waste management licence issued by, or a licensing exemption registered with, the Environment Agency and its equivalent in the devolved administrations.

Work will be undertaken to clarify how meat and bone meal from a sheep disposal scheme would be classified. That might affect the type of planning approval needed for its storage. This issue needs early clarification so as to allow suitable storage to be identified and any planning requirements to be met.

Some commercial storage capacity will be available. In addition the Intervention Board has options on further commercial storage in Scotland (60,000 tonnes) and in Northern Ireland (25,000 tonnes). As the existing stores of OTMS meat and bone meal, and stores arising from foot and mouth disease, are run down space freed up could be retained in some cases for subsequent use in storing ovine meal. That could provide perhaps in the region of 100,000 tonnes of space over the next twelve months.

The Intervention Board has on its estate eight sites used for the storage of intervention grain, together with a small cold storage capacity. Some of these sites might be suitable for the storage of ovine meat and bone meal and it would be possible if the need arises to move the grain to alternative, commercial, sites. Potentially suitable grain storage capacity could total some 232,500 tonnes.

In addition to the above, Ministry of Defence sites might be available. Land under the ownership of or otherwise held and controlled by the Crown would be subject to the Crown Development procedures. While this removes the formal requirement for planning permission, the procedure requires the proposer of the development to give notice of their intentions to the local planning authority. It follows that the views of the authority must be taken into account in reaching a decision. In view of this, authorities have a legitimate expectation of meaningful consultation.

From the above it is clear that further storage capacity would probably need to be sought on the open market. As part of further work on the plan, the Intervention Board intends to pursue the options for acquiring such storage.

*The Government would welcome views on any other action that might be taken to ensure that adequate storage facilities can be brought into use within a reasonable timescale should problems arise in respect of BSE and sheep.*

## **Transport**

It is possible that, with an ordered slaughter programme, abattoirs will arrange for collection of animals from the farm without any need for the use of collection centres. As part of further work on the planning process, the Government will, however, keep under review the possibility of a need for collection centres. That will include keeping under review the implications for livestock markets. Renderers might be expected to collect raw material from the abattoirs and deliver meat and bone meal to store. This would only leave transport of the meal from store to incinerator to be arranged by the Intervention Board, using a tendering arrange-

ment. Restrictions in place for foot and mouth disease might impact on transport from farms to slaughterhouses.

*The Government invites comments on these transport issues.*

### **Staffing costs**

The operation of a sheep disposal scheme would be likely to be less onerous than that of the OTMS, because farmers would be directed as to when their sheep will be slaughtered, rather than free to present them at will. The resources required would still be significant, however, not just in terms of the administrative staff of the Intervention Board, but also in terms of technical and farm welfare inspectors, and such bodies as the Meat and Livestock Commission (and its equivalents in Scotland and Northern Ireland), and the Meat Hygiene Service.

It is envisaged that, broadly speaking, a similar number of abattoirs would be needed as under the OTMS. However, in order to take full advantage of the rendering capacity available at a particular time, it might be necessary to use extra abattoir capacity if it can be found. This would add to the ratio of control costs per tonne of material processed.

### **Northern Ireland aspects**

The operation of a disposal scheme in Northern Ireland would give rise to a number of special considerations because of the land border. The Government will undertake further work on those as part of the planning exercise.

## **Implications For The Farming Industry and the Rural Economy**

### **Immediate aid to producers**

Under the disposal arrangements set out in the previous chapter, sheep producers would have no commercial outlets for animals slaughtered under the disposal programme and would in many cases be required to retain animals on-farm for longer than they would under normal market conditions. The Government would have legal powers to direct the disposal programme but it is questionable whether those of themselves would be sufficient to counteract what would be an understandable desire on the part of producers to dispose as quickly as possible of an asset with no value. It would be essential, for reasons of environmental protection and on the grounds of public and animal health, to ensure as high a compliance rate as possible with any disposal programme and to minimise the unauthorised disposal of animals. In addition to the legal sanctions, there would need to be economic incentives to farmers to comply with the disposal programme. However, any financial resources that might be applied to deal with BSE in sheep would not necessarily be unlimited and, indeed, might have to be re-directed from other activities.

The aim in what follows has been to suggest reasonable compensation mechanisms which are proportionate and do not overcompensate. Further discussion with the European Commission and other Member States would be needed on these ideas. The Commission's approval would be needed for any national measures. However, it is possible that aid would be available at European level in the event of a crisis, not least because it is unlikely that if BSE were found in sheep the repercussions could be confined to the United Kingdom. If there are negotiations at European level on the content of an aid package, what follows could be used to define the United Kingdom's negotiating position.

The immediate aid package available to producers in the event of a crisis might have two elements:

aid at slaughter;

financial aid to producers to ensure retention of animals to the proper welfare standards while they are awaiting slaughter.

### **Aid at slaughter**

This might be paid at a single liveweight rate per kilogramme on all ovine animals (rams, ewes and lambs) presented for slaughter as part of a Government disposal programme. The adoption of a rate based on weight would complicate the running of the aid scheme. It would require a more elaborate IT system than a single rate per head, and there would need to be arrangements for weighing and for tracking of animals through to the slaughter line. Nevertheless a weight-based payment seems most appropriate.

*The Government would welcome comments on the concept of a slaughter aid scheme of this kind. Views are also sought on whether there would be a case for a*

*separate rate for pedigree animals, in which case it would be important to guard against fraud. Comments would be welcome on how an appropriate single rate, and any separate rate for pedigree animals, might be calculated. The Government believes the aim should be to arrive at a fair rate which does not overcompensate. The Government would welcome views on whether there should be checks before slaughter to ensure that animals are otherwise (that is, apart from the BSE risk) fit for human consumption. Such checks would appear desirable to meet animal welfare objectives, and the likely requirements of European Union auditors. Views are also sought on whether, if producers were found as a result of these checks not to have kept animals to the proper welfare standards, they should not only be disqualified from aid at slaughter but should also be obliged to give back retention aid payments (see below).*

*Sheep which die while awaiting their allocated disposal dates might in principle be eligible to receive the slaughter aid. Further work is needed on how this should be implemented in practice, and the Government would welcome views on this.*

### **Retention aid**

As stated above, the main aim of the retention aid would be to ensure that animals were retained to the proper welfare standards pending disposal under the Government's programme. On that basis it would be payable for such period as a producer retains animals. It would also seem appropriate to pay retention aid only if the producer meets all the requirements imposed under the disposal programme. The aid could also be conditional on the producer keeping sheep to the required welfare standards. In order to protect public money, there might be a need to increase and target inspections under the welfare of animals regulations which would continue to apply during the period of disposal.

*The Government invites views on the desirability of a retention aid scheme of the kind outlined above.*

*Views are also invited on how the retention aid might be calculated.*

The retention aid might take as its basis the existing aid available through the sheep annual premium scheme. Bearing in mind the separate slaughter aid, the aim of the retention aid might be to give producers, broadly speaking, the same level of support as they would have received through the premium had a crisis not arisen. Much would depend on how the European Commission decided to calculate the sheep annual premium in the event of a BSE crisis. The Commission might be prepared to take special action on a European level. As the sheep annual premium scheme is subject to quota, the first element of the retention aid might also be paid to each producer per unit of quota held (that is, including quota leased in but excluding quota leased out) in the year immediately prior to the one in which the BSE crisis arises. If, however, a crisis arises at a point in the year when the final position on quota held for that year is known, the current year's quota held figures could be used rather than the preceding year's. There would need to be the possibility of appeal in cases where the producer could show that the quota held in the relevant year did not give a fair representation of his or her normal operations. An option, if the European Commission agreed, would be to

continue to make payments to producers on the basis described above irrespective of the number of ewes actually held (which would decrease over the disposal period). Such payments might be made on a degressive basis.

### **Timing of payments under the retention aid scheme**

Given the main aim of the retention aid payments, it would be important that payments should be made on a phased basis throughout the period of retention of animals. If payments were made only, say, once a year they would be unlikely to achieve the objective of persuading producers to retain animals to proper welfare standards.

An additional means of helping farmers survive the effects of a crisis would be to fund the setting up of a farmers' helpline and related advisory service.

### **Making payments direct to producers**

The Government is interested to have views on whether payments of the slaughter aid and the retention aid, if such schemes were introduced, should be made direct to producers. Although the Government has a register holding some information about sheep producers, it is not clear that the information is in a form which could be used to administer the aid schemes. The Government will consider further the possibility of compiling a register from existing information, but it is likely that to produce a reliable document sheep producers will need to be asked to register with the Intervention Board. A transfer of information from existing sources might cause data problems.

*Views are therefore invited on the question of whether there should be put in place in advance of a crisis, on a contingency basis, a registration system for sheep producers (less than 80,000 in the United Kingdom) to allow payments to be made direct to them should a crisis arise. Further consideration would need to be given to how this might link to the wider e-government agenda. It may be appropriate to have a voluntary registration system, but failure to register could then delay payments should a crisis arise. An IT system for recording all the necessary data and making payments to farmers will also need to be set up. The Government intends, as a first step and as soon as the necessary resources are available, to undertake a feasibility study of how the fundamentals of such an IT system might be put in place in advance of a crisis, on a contingency basis.*

It appears clear that the Intervention Board (which will be absorbed into the new Rural Payments Agency once it has been set up) should administer any slaughter aid, and the Government will be giving further consideration to what body would be best placed to administer any retention aid scheme. The link with the sheep annual premium is relevant. If the Intervention Board were to administer a retention aid scheme they would amongst other things need to develop the necessary links with the sheep annual premium payment arrangements.

### **Casualty animals**

*Views are invited on whether any aid package available to farmers should include help with the disposal of casualty animals and fallen stock, and if so what form this might take.*

### **Implications for related areas of the rural economy**

A BSE crisis would have significant implications for the rural economy. Unlike foot and mouth disease, there would appear to be no grounds for concerns arising regarding the closure of the countryside should BSE be found in sheep. (See paragraph 7 of the Introduction.) Any effects on rural tourism should therefore not be comparable to those which occurred in the case of foot and mouth disease.

The Government will be undertaking further work on the means to be employed to help the rural economy adapt to the changed circumstances likely to exist after a BSE crisis in sheep. Sheep numbers after a crisis are likely to be well below those before, and alternative economic opportunities would need to be identified.

*The Government is interested in having views on possible means of helping the rural economy to adapt.*

One possible option would be to look at individual rural areas that are particularly dependent on sheep production, and to revisit and reprioritise relevant regional development programmes which provide the framework for expenditure in the rural economy for the next six years or so. The revised programmes would need to attempt to identify existing alternative opportunities and how further opportunities might be created. (The programmes would need to be wide-ranging in their scope). As currently written, programmes would not be likely to have a measurable impact on a crisis involving BSE in sheep. Given that the approval process for changes is a complex one, it would be necessary to come up with mechanisms that would allow quick activation of revised programmes should a crisis arise. The programmes would need to include in their coverage, as well as the relevant areas of Scotland, Wales and Northern Ireland, those rural areas of England (such as parts of the North East, North West and South West) where sheep are particularly important.

# Screening for 'Safe' Sheep and Segregation of Their Meat from Potentially Infected Sheepmeat

## Introduction

If evidence were to become available which indicated or confirmed the presence of BSE in the United Kingdom sheep flock, it would not follow that all sheep in the flock were infected or at risk of being infected. If it were possible to screen out and segregate some or all animals that were "safe", and if a means were available to ensure that such animals could be traced and identified, screened out animals could continue to be allowed to pass into the human food chain.

## Screening methods

There are three potential options for screening out "safe" sheep. The options, which are not mutually exclusive, are:

- Allowing into the food chain only the offspring of rams or ewes whose genotype makes them resistant to TSEs (that is, ARR/ARR rams); such offspring will be at least semi-resistant to TSEs (that is, they will carry at least one ARR allele);
- Allowing lambs into the food chain only if they have been genotyped and have been shown to be resistant or semi-resistant to TSEs;
- Allowing animals into the food chain only if they have been tested, either live or after slaughter, for the presence of a TSE and no TSE has been detected.

These options are considered in more detail in the following paragraphs. In a crisis situation it would be necessary to take into account the effectiveness of any screening method in reducing risk.

## Allowing only offspring of resistant rams into the food chain

34. At its meeting on 28 February 2001 SEAC advised that some degree of assurance could be provided for public health, if BSE were to be found in a small number of sheep, by a strategy which:
- Permitted only animals which were resistant or semi-resistant to TSEs (that is, which carried at least one ARR allele) to enter the food chain;
  - Coupled this to an age cut-off, perhaps of one year; and
  - Amended current SRM controls to remove intestine from the food chain.

The genotype structure of individual animals can be determined with accuracy. SEAC has, however, also recommended urgent research to investigate the theoretical possibility that sheep which are genetically resistant to developing clinical TSE could be latent carriers of infection in neural and non-neural tissues. In the case of sheep whose genotype makes them semi-resistant to BSE, infectivity is not detectable in any tissues in animals less than 12 months old.

The available information suggests that about one quarter of the total breeding ram population of about half a million is resistant to TSEs, and about two thirds

are semi-resistant. These are, however, approximate figures based on limited evidence.

This first option would allow into the human food chain only lambs produced from flocks accredited as using only ARR/ARR resistant stock. With such flocks it would be possible to be sure that all lambs would be either resistant or semi-resistant. In such circumstances breeding rams and ewes (and for control purposes, a percentage of lambs) would need to be genotype tested. To start with the number of accredited flocks will be small, but should increase over time as levels of resistance increase through the national scrapie plan (NSP). The NSP was launched in Great Britain in July and is due to be launched in Northern Ireland by December 2001. Special arrangements might be needed for rare breeds which had no animals with the required genotype structure.

It would, of course, be essential to have secure identification arrangements and a secure records system in place, both to ensure that that genotype information can be related to the individual animal and to ensure that the age cut-off can be enforced. (The only way the age of sheep can be determined in the current absence of a comprehensive system of reliable farm records is by dentition, and evidence suggests that use of dentition carries a margin of error of at least four months.) It is unlikely that the various identification arrangements currently in place for sheep are secure enough for the purposes of this option, and only animals identified under the national scrapie plan would be included.

Because of the delay in obtaining the results of genotype testing (about two weeks might need to be allowed) it would appear necessary in the case of genotype testing to identify all animals tested and not just those eventually identified as "safe". As well as identifying tested animals, in the case of those animals that tested "safe" their offspring would also need to be identified if they were to be allowed into the human food chain. The total number of animals to be identified would depend on the number of "safe" animals in the breeding flock at the time of a crisis.

The amount of time required probably rules out the application of the genotyping test after slaughter. For the same reason, testing slaughter animals in special off-farm lairages prior to slaughter appears effectively to be ruled out. The finding of such lairages and the animal welfare problems would make that a daunting route. (Normally animals are kept for no more than a few hours in the lairages at live auction markets.) Ideally we would also wish to allow "safe" animals to be marketed as far as possible in a "normal" manner, with a minimum of new directions. We would want to require animals to be delivered to "collection centres" only if the numbers were so small that the live auction market system broke down. Nor in the case of breeding animals would it be sensible to require them to be brought to off-farm lairages for testing and identification.

### **Allowing only resistant or semi-resistant lambs into the food chain**

35. This second option would allow lambs into the food chain only if they have been genotyped and have been shown to be resistant or semi-resistant to TSEs. Many of the considerations set out above for the first option apply here

too. But the scale of the genotyping requirement would be very significantly higher since about 20 million lambs would need to be genotyped annually at a cost of some hundreds of millions of pounds. That is well in excess of the genotyping capacity that will be available under the national scrapie plan. Genotype testing might possibly be viable on a limited scale. However, the scale and the practicalities of the level of testing mentioned above would appear to rule genotype testing out as a viable proposition for large scale lamb production for consumption. It might be used on a limited scale to maintain a smaller home market for lamb while rebuilding a 'safe' national flock.

### **Allowing into the food chain only animals that have been tested for a TSE**

36. This third option would allow animals into the food chain only if they have been tested, either live or after slaughter, for the presence of a TSE and no TSE has been found.

A TSE test would in principle be capable of identifying all animals which were not infected with the disease and which could therefore be considered "safe". (The first and second options would be capable of identifying those sheep with a resistant or semi-resistant genotype, but it would not be capable of identifying sheep with other genotypes which are nevertheless not actually infected with a TSE.)

There are issues concerning how early in the incubation period existing diagnostic tests will pick up the disease-agent in sheep. Infectivity has to be present in sufficient quantity to be detected by the tests. There is therefore a problem about deciding on which tissue to test in the case of sheep. TSE tests after slaughter already apply in certain limited circumstances at European level. A TSE test can in principle take place on either the live animal or on the carcass after slaughter. However, a test for live animals does not yet appear to be a reality.

Testing appears in principle to be capable of producing results within 24 to 48 hours, but a limiting factor is the number of samples that can be processed at any particular time.

It would be necessary to test and identify about 20 million animals or carcasses per year on an on-going basis until BSE was eliminated from the flock (assuming that proved possible) whether by means of the national scrapie plan or by some other means. The cost of applying a TSE test would therefore be considerable but it could, under certain scenarios, serve a valuable role in risk reduction and in boosting consumer confidence. TSE testing might make it possible to avoid the extensive costs of slaughter, disposal and storage that would arise under the measures outlined in chapter 3 but much would depend on the nature of the risk, given that currently available tests will only pick up the presence of disease after infectivity has developed to detectable levels.

*The Government would welcome comments on the three screening methods identified above, and any suggestions for additional methods of screening. The Government would also welcome comments on the question of where screening should take place.*

## Identification

There will be a secure identification system for sheep participating in the national scrapie plan, but there is at present no wider sheep identification system that would allow breeding animals or their offspring to be identified on a sufficiently secure basis to allow them to pass into human consumption. New marking requirements came into effect from January 2001, but they do not allow sufficiently secure identification. Given the need to demonstrate that we would be distinguishing securely between "safe" and "unsafe" animals, nothing short of electronic identification of sheep appears viable. There would also be a need for supporting scanning facilities and computer software. Other requirements would include the allocation of a unique number to each sheep, and the setting up of a central database and on-farm registers. A system for allocating numbers would also be necessary. In its procurement decisions under the national scrapie plan the Government has given high priority to the need for secure identification, including the necessary support systems, taking account of the fact that the identification system chosen may also need to serve to screen "safe" from "unsafe" animals, whether using genotyping or a TSE test, should BSE be found in sheep.

*The Government would welcome views on the identification issues outlined above.*

## Would there be a sufficient commercial incentive to persuade the industry to market "safe" sheep?

If a BSE crisis were to occur in sheep that would inevitably provide a blow to consumer confidence. Some importers of United Kingdom sheepmeat and some domestic consumers may not accept "safe" sheepmeat. (At present as a result of the foot and mouth disease outbreak an export ban is in force since 21 February 2001.) Added to that the number of "safe" sheep available for human consumption could be very small to start with, especially if it is assumed that it will not be possible to make use of a diagnostic test to identify "safe sheep". That reduction in supply might tend to push up prices, but the likely reduction in demand and increase in imports from "BSE-free" countries would work towards counteracting that. It thus seems unlikely that market prices for United Kingdom sheepmeat would rise. They could fall, and fall significantly. There must be real doubt about whether, in such circumstances, producers and abattoirs would find it commercially viable to market "safe" sheep, particularly in the early stages following the emergence of a crisis.

This raises a question about the viability of aiming, in the initial stages following any BSE crisis in sheep, at immediately putting a limited number of "safe" sheep into the human food chain. An alternative approach would be to aim in the first instance solely at building up, through genotyping, a breeding nucleus of "safe" sheep which would eventually increase the flock to a level that would again be commercially viable. The NSP aims to increase the levels of resistance in the national flock over time.

*The Government would welcome views on this issue.*

### **The cost of testing and identification**

The cost of the blood test necessary to determine genotype, and of a TSE test, is likely to continue to represent a significant proportion of the value of the sheep itself. Identification and other costs would be additional. However, increased demand and economies of scale would be likely to force the prices down. Those producers who had some grounds (for example previous commercial tests or more general knowledge of their breed) for believing that their breeding animals met the genotyping criteria may be willing to pay, since a result that went the right way would be likely to place them at a considerable commercial advantage. Others might be less willing to pay.

If a testing and identification route is to be effective, some form of state subvention in respect of testing and identification costs might be necessary.

*The Government would welcome views on these issues.*

## Rebuilding the Industry

### A post-crisis structure for the sheep industry

37. The sheep industry that would emerge from a major BSE crisis would be likely, at least in the short term, to be different from the existing one.

*The Government would welcome views on the structure that should be aimed for post-crisis. Proposals from the European Commission for the reform of the sheepmeat regime, if and when they emerge, may also be relevant in this context.*

### How to achieve post-crisis objectives

*The Government would also welcome views on the best means of achieving our post-crisis objectives. The means are likely to include the use of resources and support mechanisms which already exist within agriculture (such as rural development programmes) and outside it.*

Two issues appear crucial to the speed with which it would be possible to build up to a new structure. The first is how long it would take to eliminate BSE infectivity from the flock and (if relevant) from the environment. The second is whether it will be possible to have a means of definitively screening out "safe" sheep. Both issues throw up areas of uncertainty.

We would not know definitively how BSE entered the sheep flock if it is found there. Given the similarity between experimental BSE and scrapie in sheep, it seems unlikely that, if found to be present now, BSE would die out of its own accord over an acceptable timescale. However, current scientific knowledge is not sufficiently developed to allow conclusions to be reached on the mechanism of transmission of TSEs in sheep. Research is on-going in this area. When and if the mechanism of transmission is understood it might prove an option to avoid particular routes of transmission by culling or husbandry. If that happened a diagnostic test for BSE might make a contribution to an eradication policy. If it is assumed that genotyping is capable of generating a nucleus breeding flock of genetically resistant sheep, that route could be employed to produce over time a new sheep flock producing "safe" sheepmeat. Depending on how early in the life of the national scrapie plan a BSE crisis arose, a rebuilding process by the genotyping route could take time. In the interim genotyping and/or a BSE test might be capable of being used to identify sheep that could be allowed to pass into the human food chain. This would be important in maintaining a consumer market for home produced lamb in the intervening period. Any other sheep would need to be disposed of under special arrangements.

It is not known whether BSE infectivity would exist, and might remain, in the environment even after infected sheep have been removed. There is, however, some evidence (not universally accepted) that scrapie infectivity is capable of remaining in the environment. If the same were true of BSE infectivity, it would not prejudice a rebuilding programme based on genotyping if, as is likely, residual infectivity did not affect "safe" sheep screened out by genotyping. If, however, residual infectivity were thought to remain and if genotyping could not be used as a means of

rebuilding the flock, it might be necessary to allow land to remain unstocked by sheep and goats for a number of years to allow infectivity to disappear. Only thereafter could restocking by sheep and goats occur. Such restocking would need to take place from abroad or from known genetically resistant flocks which would be constraining factors. Leaving land totally unstocked for a number of years could have adverse environmental consequences, and stocking by alternative species might be an option in at least some areas. However any alternative species would need to be incapable of contracting or carrying BSE. A policy of allowing land to remain unstocked by sheep and goats could be subverted if wild animals prone to BSE entered any unstocked land. Another option would be to keep land stocked with sheep and/or goats while ensuring that none of them entered the food chain. This would be an attractive option if developments in scientific knowledge were to provide further evidence against the theory of environmental infectivity. However, it needs to be recognised that there would be no commercial outlet for sheep that could not be shown to be 'safe'.

**6.2.5** *The Government will be undertaking further analysis in this area and would welcome any views on the rebuilding of the industry.*

## Summary of Issues for Consultation

### Chapter 1

#### *Action and decisions following emergence of test results*

Issue	Paragraph
The steps the Food Standards Agency proposes to take in deciding whether its existing advice on the safety of sheepmeat needs to be changed.	1.1.5

### Chapter 2

#### *Immediate action following onset of a BSE crisis in sheep*

Issue	Paragraph
The actions the Food Standards Agency proposes to take for the human food chain. Suggestions for further actions that might be taken.	2.2.5
In the case of human and veterinary medicinal products, the option of asking marketing authorisation holders and applicants voluntarily to disclose to the Government - or as an alternative to keep a readily accessible register of - information about any sheep and goat products not covered by the European guidelines. Suggestions for any other actions that might be taken on a contingency basis.	2.2.10
Suggestions on any other actions that might be taken on a contingency basis in relation to sheep- and goat-derived products outside the human food chain.	2.3.2
Suggestions for additions or amendments to the list of bodies the Government proposes to brief in the event of a crisis.	2.4.3
Suggestions on any further action that might be taken on a European level, or on any other aspects of the European dimension that should be taken into account in the planning exercise.	2.5.3
Suggestions on aspects relating to imports and exports, particularly on the practicalities of operating controls.	2.5.5

### Chapter 3

#### *Slaughter and disposal programme if it becomes necessary to slaughter all or part of the United Kingdom flock*

Issue	Paragraph
Suggestions for intermediate steps that might be effective in the early stages of any BSE problem in limiting the scale of the problem.	3.2.2
Comments on the analysis of the scale of the disposal exercise that might be necessary. Suggestions for further action that might be taken to refine the analysis.	3.4.4
Comments on the conclusion that the Government will need powers to manage the disposal programme in a way which allows it to direct individual farmers about when they should dispose of their sheep, and in what order.	3.5.3
Comments on proposals to make aid dependent upon the farmer presenting animals in a 'fit' condition, and upon the correct type of animal being presented at the correct time.	3.5.5
Comments on the proposal that the following should be key features of the management of a disposal scheme:  Government powers to direct when a producer presented animals for slaughter, and in what order;  any Government aid to take account of need for orderly disposal and need to encourage maintenance of welfare standards in the case of animals on farm awaiting disposal;  increase in inspections under animal welfare regulations of farms with animals awaiting disposal;  the speed of the disposal programme.	3.5.6
Views on the proposal that a disposal programme could be spread over a number of years if necessary.	3.5.8
Views, particularly from representatives of the slaughtering industry, on whether the total necessary abattoir capacity would be available.	3.6.4
Comments on the proposal to discuss tenders, in advance of any crisis and on a contingency basis, for the abattoir capacity that might be needed.	3.6.6
Comments on the proposal to draft legislation on a contingency basis to allow sheep slaughtered as part of a cull to be slaughtered in a licensed abattoir.	3.6.8
Comments on the analysis that suggests that the route of placing major	3.7.6

reliance on direct incineration after slaughter is unlikely to be attractive on grounds of practicality and cost. Views, particularly from representatives of the rendering industry, on the assessment of available rendering capacity.	3.8.3
Comments on the case for discussing tenders, in advance of any crisis and on a contingency basis, for the rendering facilities that might be needed.	3.8.4
Comments on whether, in the event of a large-scale sheep disposal scheme, the level of surplus capacity available would be such as to produce real competition in the rendering sector.	3.8.5
Views from the rendering industry on:  whether a significant percentage of tallow could be incinerated by renderers with energy recovery to fuel their process;  the conclusion that storage of tallow should not give rise to major problems.	3.9.2
Comments on:  the Government's estimates of the incineration capacity available;  the Government's intention to examine, on a contingency basis and in advance of any crisis, whether incineration contracts and consents could be renegotiated to cover meat and bone meal arising from a sheep disposal scheme;  and  Suggestions for any other action that might be taken.	3.9.5
Views on any other action that might be taken to ensure that adequate storage facilities can be brought into use within a reasonable timescale should problems arise in respect of BSE and sheep.	3.10.9
Comments on transport issues	3.11.2

## Chapter 4

### *Implications for the farming industry and the rural economy*

Issue	Paragraph
Views on:  the concept of a slaughter aid scheme;	4.2.2

whether, under a slaughter aid scheme, there would be a case for a separate rate for pedigree animals;	
how an appropriate single rate, and any separate rate for pedigree animals, might be calculated if there were a slaughter aid scheme.	
Views on whether there should be checks before slaughter to ensure that animals are otherwise (that is, apart from the BSE risk) fit for human consumption.	4.2.3
Views on whether, if producers were found as a result of such checks not to have kept animals to the proper welfare standards, they should not only be disqualified from aid at slaughter but should also be obliged to give back retention aid payments.	4.2.3
Comments on the practicalities of how sheep which die while awaiting their allocated disposal dates should receive slaughter aid.	4.2.4
Views on the desirability of a retention aid scheme.	4.3.2
Views on how retention aid might be calculated.	4.3.3
Views on whether payments of slaughter aid and retention aid, if such schemes were introduced, should be made direct to producers.	4.5.2
Views on whether there should be put in place in advance of a crisis, on a contingency basis, a registration system for sheep producers in the United Kingdom, to allow payments to be made direct to them should a crisis arise.	4.5.2
Views on whether any aid package available to farmers should include help with the disposal of casualty animals, and if so what form this might take.	4.6.1
Views on possible means of helping the rural economy to adapt after a BSE crisis in sheep, if one occurs.	4.7.3

## Chapter 5

### *Screening for 'safe' sheep and segregation of their meat from potentially infected sheepmeat*

Issue	Paragraph
Comments on three possible screening methods, and suggestions for additional methods of screening. Comments on the question of where screening should take place.	5.5.6

Comments on identification issues.	5.6.2
Views on whether the objective in the initial stages following any BSE crisis in sheep should be to build up through genotyping a breeding nucleus for eventually increasing the flock to a level that would be commercially viable, without any objective of immediately putting a limited number of 'safe' sheep into the human food chain.	5.7.3
Views on how the cost of testing and identification might affect uptake.	5.8.3

## Chapter 6

### *Rebuilding the industry*

Issue	Paragraph
Comments on the structure that should be aimed for after a BSE crisis.	6.1.2
Views on the best means of achieving post-crisis objectives.	6.2.1
Suggestions for the forms of Government support for the recovery process that might be appropriate and how they might be best targeted.	6.2.5

Ved CVO-mødet den 26.-28. september blev der, på anmodning fra den tyske delegation, fra UK delegationen fremsat en udtalelse med efterfølgende uddelte bilag, som vedrører forlydende om muligheden af, at det kan påvises, at der optræder BSE hos får smittet i UK under produktionsforhold.

Følgende referat af UK's fremlæggelse den 26. september forventes at ville fremgå af referatet fra mødet (endelig tekst foreligger endnu ikke, men dette afsnit er en oversættelse af UK delegationens egne forslag til formuleringer til referatet, udformet den 28. september):

"På anmodning fra den tyske delegation informerede UK delegationen CVO-gruppen om følgende:

- UK's myndigheder er i færd med at offentliggøre med henblik på høring et udkast til beredskabsplan for BSE i får i overensstemmelse med TSE forordningen;
- UK's videnskabelige komité forventes i oktober (i forbindelse med et møde den 19. oktober) at overveje den nuværende opfattelse af den forskning, som er igangsat med henblik på den mulige forekomst af BSE hos får;
- Et af de igangværende projekter undersøger for tegn på BSE hos får, som i begyndelsen af 1990'erne blev diagnosticeret med scrapie. I denne undersøgelse bliver en "pool" af 3000 fårehjerner med scrapie indsamlet mellem 1990 og 1992 typebestemt. Vanskeligheden i denne undersøgelse er at skelne BSE fra de mange kilder til scrapie. Hvis BSE påvises, skal forskerne også forsikre sig om, at det kan udelukkes, at der er tale om krydskontamination af prøverne fra BSE-inficerede ko-hjerner. Yderligere undersøgelser af mulig krydskontamination er igangsat. UK's egne eksperter mener, at det endnu ikke er muligt at drage nogen konklusioner af denne forskning;
- Siden den tilgængelige information ikke tyder på, at situationen har ændret sig, vil UK myndighederne ikke foreslå nogen ændringer på nuværende tidspunkt;
- UK myndighederne vil nøje følge forskningens resultater og det kan tænkes at de senere vil revidere rådgivningen i lyset af eventuelle nye resultater eller anbefalinger."

UK delegationen udelte den 28. september kopi af det nævnte udkast til TSE-beredskabsplan for får, samt kopi af UK regeringens reaktion på Phillips-rapporten om "UK BSE-inquiry".

I førstnævnte udkasts afsnit 2.2.1 skitseres hvorledes et dokumenteret fund af BSE hos får formentlig ville udløse forskellige stramninger i reglerne for anvendelse af produkter fra får og ged i den humane fødekæde, bl.a. overvejelser om forbud mod kød og mælk fra dyr, som ikke kan dokumenteres at være fri for BSE. I afsnit

2.5 redegøres der kort for, hvorledes situationen forventes at påvirke EU-Kommissionen og medlemsstaterne.

Ved direkte kontakt til UK og ansatte i Kommissionen kom det frem, at Kommissionen overvejer mange forskellige scenarier, og at der er bestilt en rapport fra den videnskabelige styrekomité om dette emne. Det menes, at TSE-BSE-ad-hoc-gruppen p.t. arbejder med et oplæg til denne rapport, som muligvis kan behandles på SSC-mødet den 18.-19. oktober.

Disse udmeldinger har ikke affødt nogen særlig umiddelbar reaktion henede, hverken fra Kommissionen eller fra noget andet medlemsland.

Rådssekretariatet meddelte, at sagen formentlig vil blive diskuteret på rådsmødet i oktober (den 22.?).

I øvrigt henvises til, at UK's Food Safety Agency har haft en dækkende omtale af sagen på deres hjemmeside siden 2. august 2001: ([www.foodstandards.gov.uk/press\\_releases/statements/st010802.htm](http://www.foodstandards.gov.uk/press_releases/statements/st010802.htm)).

I relation til fårehold i Danmark kan det bemærkes, at vi ikke har diagnosticeret scrapie i Danmark, at der er planlagt en intensiv overvågning fra 1. januar 2002 som anført i TSE-forordningen, at der er importeret får, formentlig også fra lande med scrapie, samt at det bør søges afdækket hvor udbredt brugen af kød- og benmel har været til danske får op til i dag.

Preben Willeberg