

PART 3

LESSONS LEARNED

Introduction

- 3.0.1 The foot and mouth disease outbreak in 2001 was on a scale previously unknown. It had a huge impact on farming and on other parts of the rural economy, notably tourism. The course of events is set out in earlier parts of this Memorandum. During the epidemic there were developments in policy which represented the Government's ongoing response to its assessment of events and the impact of Government policies on those events.
- 3.0.2 Others will give evidence to the Inquiry on their understanding of the events and why they happened. This part of the Government's Memorandum explains what issues for consideration are seen as having arisen from the way the outbreak was managed, what actions have been taken as a result of developments during the outbreak, and what is planned for the future. Full consideration of all the policies, organisational structures and plans must await the outcome of the Inquiries and public debate on the way forward. Some of the actions described here therefore can be seen as interim measures; others represent positive and immediate moves to implement policies identified during the outbreak or to build on approaches that worked well during the outbreak.

Issues Identified for Action

- 3.0.3 The first section covers the issues that have been identified for action, identifying how this is being taken forward. This includes developing effective and large scale operational contingency plans; the importance of disease control policies taking full account of the wider rural policy context including mitigating the impact on rural businesses and communities; taking forward plans on vaccination in the EU and by research; maintaining the availability of increased serological capacity; the development of animal identification and movement controls; taking forward work on disposal options; and developing generally applicable lessons on improving communications, data management and management information. It also covers areas where existing policies have been successfully implemented during the outbreak and emphasises the importance of maintaining existing practices that have been found to work particularly well. This section therefore includes the use of independent and public scientific advice and the benefits of engaging

early and effectively with other countries, and in particular with other Member States and the European Commission.

Action already taken

- 3.0.4 The second section covers those areas of policy where action has already been taken to develop issues identified as needing change. Here is included the introduction of the Swill Feeding Ban, the introduction of the Animal Health Bill and current efforts to stop illegal imports of meat and meat products. This section also covers the actions taken to drive home to farmers and others in contact with stock the overriding importance of good biosecurity.

Structural and Organisational changes

- 3.0.5 The final section indicates the structural and organisational changes that have been made or that are planned to come into effect in an emergency to carry forward the lessons learned in this outbreak. These build on the importance of ensuring that disease control policies are considered within the framework of the whole rural economy - by the creation of DEFRA; the need for central co-ordination in the event of emergencies - the establishment of the Civil Contingencies Secretariat in the Cabinet Office; the importance of clear lines of management and control in an emergency - demonstrated by the restructuring of DEFRA and establishment of the post of Director General of Operations and Service Delivery to whom all the services in the field, including the Veterinary Field Service now report; the benefits of a broad cross-departmental approach to tackling problems, particularly those that affect much of the country; and the need to engage all stakeholders and interested organisations, particularly locally based organisations, in developing the approach to policy and operational issues which affect so many people.

SECTION 1

ISSUES IDENTIFIED FOR ACTION

Contingency Planning

- 3.1.1 As explained in Part 2, Section 2, the Government had existing EU approved contingency plans, which were based on international experience and therefore aimed at a local epidemic. These were implemented effectively at the start of the outbreak. The unprecedented range and nature of the UK outbreak meant that the Government rapidly went beyond the plans in terms of resources and control strategy. The Government is now working to revise and update existing detailed local plans and veterinary guidance and codify the experience gained from the outbreak into interim operational contingency plans. These will also ensure that dealing with a disease outbreak is set, at the outset, within the context of its impact on the rural economy, and the need to protect the environment and human health. Other countries in Europe and elsewhere are similarly reviewing and revising their plans which, like that of the UK, were based on the expectation of an outbreak occurring on a similar scale to those previously experienced. The development of these plans does not seek to pre-judge the outcome of this Inquiry and they will be developed further after the Inquiry has reported.
- 3.1.2 The plans are based on assumptions that have developed during the 2001 outbreak as the most effective way of stamping immediately upon foot and mouth in order to control an outbreak. These assumptions, and extant policy, will be subject to veterinary risk assessment in the event of an outbreak to ensure that the response is proportionate. They are:-
- All susceptible animal movements would be stopped countrywide once the first case was confirmed;
 - Infected Areas would be introduced imposing movement restrictions and biosecurity requirements to Restricted Infected Area standards;
 - Infected Premises will be culled within 24 hours of report, and all dangerous contacts will be traced and dealt with within a target of 48 hours, including contiguous premises (subject to veterinary judgement);
 - Vaccination should be considered as a separate strategy, but would not be an alternative to slaughter in the first instance;

- Footpaths would not be closed outside Infected Areas, and within those areas, closures would be based on the published protocol and veterinary risk assessments;
- Disposal by incineration would be implemented immediately, with rendering and other disposal routes being available as an additional resource, subject to environmental, land use planning and public health considerations.

The Government would welcome the views of the Inquiry on these points.

3.1.3 In the context of these assumptions the interim plan comprises three sections:-

- (i) Contingency arrangements (planning stage) which looks to demonstrate a level of preparedness i.e. that resources, accommodation and disposal options are readily available and that all interested parties are briefed on their responsibilities and will be engaged in regular testing of its operation;
- (ii) Report case - immediate action (operational stage). This deals with operational issues from a national and divisional perspective in the first day or two from disease confirmation. It covers how animal health offices would respond on day one to a disease outbreak and indicates when the armed forces should be alerted. It covers the establishment of central and local structures and sets out their job descriptions;
- (iii) Report case - longer term action (operational stage). This section develops the same issues, but from 48 hours+ and relates to the establishment of regional operations directors and divisional disease emergency control centres.

3.1.4 Dealing both with the broader issues of preparedness and the detailed structures and staffing that are necessary to make the operation run effectively, the plan draws heavily on experience during the last outbreak. In particular the plan will ensure that disposal routes, procurement and contract management information and instructions, financial structures and systems, IT systems, and management information requirements on all activities are fully thought through and included so that they can be implemented immediately and efficiently.

- 3.1.5 As one of the main issues is the provision of staff resources, the plan provides senior management agreement in departments across Whitehall to staff being made available to manage and run the operation immediately the need is identified. It also sets out the way in which the armed forces would be alerted so that engagement, as necessary, could be achieved most effectively. It sets out the need to plan and operate closely with other agencies concerned such as the Environment Agency, Government Offices and local authorities so that all concerned understand the requirements and their part in disease control, in the wider context of environmental and public health protection. It seeks to ensure good communication between all the organisations involved and with the community at large, and a fully co-operative approach to disease eradication.
- 3.1.6 The contingency plans currently being prepared focus primarily on England and Wales, with similar work being taken forward in Scotland. A separate plan is being drawn up in Northern Ireland.
- 3.1.7 As the plan draws on the involvement and support of other departments and the wider community it has been published on the DEFRA website as a living document and will be updated to ensure that it reflects policy developments and operational experience. It is intended that there should be national and local simulation exercises during 2002 to test the plans and ensure that they, together with recommendations from the 'Inquiries' reports, will go to produce effective longer-term contingency plans for dealing with foot and mouth disease and other diseases.

Keeping the Countryside Open

- 3.1.8 The early spread of FMD through sheep movements before the disease was reported meant that eradication measures inevitably had a wider impact on the rural economy than would have been the case if the disease had been contained in a small area. The Government believes that the eradication policy was correct, but recognises that managing the effect of disease control, slaughter, disposal and biosecurity measures on the wider community is of itself a major exercise and needs to be included in future contingency planning. In the early weeks of the outbreak, most of the pressure – not only from farmers, but also from the media and overseas Governments, was for a restrictive approach to countryside access. Only gradually, as the impact of closures on rural tourist businesses became apparent, did the balance of public and media comment shift. Even then, some – including some local authorities – continued to take the view that any precaution that might reduce disease spread was justified, regardless of its collateral impact. The balance between the imperative of disease control and of preventing damage to

the rural economy, within the context of EU legal constraints, is an area where the advice of the Inquiry would be particularly useful.

3.1.9 Issues of particular relevance are:-

- how widely powers to close rights of way should be available, and by whom (DEFRA or local authorities) they should be exercised;
- the guidance to be given to local authorities on whether and how widely to exercise rights-of-way closure powers, and to owners and operators on whether to close other events and visitor attractions;
- the importance of basing decisions on both full published veterinary risk assessments, and on an assessment of the likely impact of closures on the non-farming economy;
- the importance of explaining clearly to the public and national and international media the basis on which decisions have been taken, including an explanation of the risks - low but not negligible - that disease may be transmitted by non-farming countryside users;
- the need to convey different messages to different target audiences: to farmers about the need for strict bio-security, and to local authorities, event organisers and the public that most countryside recreation could safely continue; also the difficulty of qualifying a highly precautionary message once more information and advice was available.

3.1.10 The Rural Task Force recommended that a protocol should be developed in anticipation of any future outbreak of FMD or other animal disease, based on a veterinary risk assessment, as to how widely and for how long footpath closures and restrictions on access are likely to be justified, taking into account the impact on walkers and the businesses that cater for them beside the requirements of disease control. The Government plans to consult shortly on the draft of such a protocol. On the basis of present advice and recent experience, this is likely to recommend that closures should normally be confined to Infected Areas, and probably to 3km zones around infected premises. The existence of such a protocol should much reduce the risk of advice being issued in good faith at the start of an outbreak, which with subsequent information and knowledge proves to have been unduly precautionary.

Measures to mitigate the impact on Rural Businesses

- 3.1.11 There is a need for quickly available and reliable information on the impact of disease control measures on rural businesses. Employment data at the level of the whole economy cannot measure accurately the impact on individual sectors, particularly those such as tourism with high levels of self-employment; routine monitoring of small businesses would not be cost-effective and would increase their regulatory burden. Surveys are probably the best tool, but there is a need to have contingency arrangements so that ad hoc surveys can be mounted quickly. A similar approach is needed for collecting information on tourism. It will provide reports on the scale and geographical extent of the impact on sales and losses.
- 3.1.12 There is no legal liability to pay compensation to those who suffer economic loss where the Government is performing its public functions as it did during the FMD outbreak. However, the Government may be justified in particular when businesses of a particular type or in a particular area are suffering serious losses, in giving assistance to facilitate survival and aid recovery. This can be important not just in terms of the survival of individual businesses, but in the context of safeguarding the economy and community as a whole in a badly affected area.
- 3.1.13 Grants from the Business Recovery Fund - the principal form of direct assistance - were tied to expenditure on reinvestment for recovery. However, the main problem for most small rural businesses, both farms which had not been culled out and non-farming businesses, was the need for help with cash-flow to survive, particularly to help meet the costs of temporary borrowing. The temporary interest-free deferral of tax was therefore among the most popular forms of help provided. There is a need to review mechanisms for providing support that meets businesses' needs without compromising the no compensation policy. The Inquiry's views on this issue would be appreciated.
- 3.1.14 A further issue in relation to supporting small non-farming business was the need to negotiate separately each element of such support between DETR, DEFRA, DCMS and the Treasury. As a result, assistance was provided in a range of forms and in a series of tranches over a long period. The Government's stance could therefore easily be presented as grudging and defensive, and unnecessary ill-will was generated among affected businesses. The Government acknowledges a need, at an early stage in an outbreak, once reliable information is available about the effect on non-farming businesses, to reach early decisions about the scale and form of help it would be appropriate to provide.

Vaccination

- 3.1.15 The framework on vaccination is largely determined at EU level and the strategy for the future role of vaccination needs to be urgently considered at the EU level. Already action is being taken, based on what was learned during the epidemic. The UK will contribute to discussions on the revised proposal for a new EC Directive to control FMD which is likely to be issued by the Commission in the early part of 2002. The experience of the 2001 outbreak and the findings of the EU FMD conference, which recognised that the EC needed to be able to respond rapidly and flexibly to future outbreaks and that the appropriate response might include emergency vaccination, will be taken into account in the deliberations on the Directive.
- 3.1.16 The need for more research into FMD vaccines and tests to distinguish between vaccination and non-vaccinated animals was strongly endorsed by the EU FMD conference in December. The OIE annual meeting in May is the first opportunity for this issue and that of movement restrictions and post-vaccination treatments to be raised.
- 3.1.17 The Government looks forward to the recommendations of the Royal Society and Lessons Learned Inquiries to help it establish a clear basis for decisions, within the framework of EU law, on the use of vaccination in a future outbreak. Issues being examined meanwhile include contingency work on identifying potential vaccination centres and their requirements, and updating instructions for running a campaign.

Serology

- 3.1.18 At the start of the outbreak, serology was used principally as an aid to diagnosis, to enable Infected Areas to be lifted and to assist epidemiologists. It was quickly realized that the existing capacity at the Institute for Animal Health, Pirbright, would be insufficient to allow for the increasing demands as the number of cases grew.
- 3.1.19 The decision substantially to increase serological capacity was also influenced by the fact that the EU, in order to declare the UK FMD-free, was likely to require that a serological survey be undertaken of all holdings with sheep and goats in protection zones and a random sample of holdings with sheep and goats in surveillance zones.
- 3.1.20 To allow for such mass testing, DEFRA funded capital improvements to laboratories at CAMR, AHT and to VLA regional laboratories at Penrith, Shrewsbury and Luddington to bring the laboratories up to the required containment standards for FMD serology. This was a major

achievement; it meant that capacity which initially was only 400 tests a week was increased to over 200,000 a week, in time to deal with the number of samples taken through the autumn as a major effort was put into lifting restrictions and enabled the UK to achieve FMD-free status quickly after the epidemic ended. It also reflects another major achievement in providing training and supervision by vets for the hundreds of lay bleeders who were recruited for this task at DCCs across the country. Three VLA regional laboratories have now been decommissioned although they could - relatively quickly - resume serology testing should that be necessary. The contracts for serology at CAMR and AHT last until at least mid-May and mid-November respectively. Contingency plans for serology testing on a mass scale for the future are currently being drawn up.

Disposals

- 3.1.21 This outbreak demonstrated that once all the available disposal options were in use disposal was not a constraint on a policy of eradication. However, of all aspects of the operation, disposal aroused most public reaction, both locally, with the use of mass burial and burn sites causing frequent demonstrations by local residents and community action to limit their use, and across the world, as tourists reacted to media coverage of pyres. There is therefore a need to ensure for the future that sufficient disposal routes are available immediately, which can be operated within environmental and other constraints and are, where possible, those most acceptable to the public.
- 3.1.22 During the course of this outbreak an agreed disposal hierarchy was developed and followed. This hierarchy takes account of environmental and public health issues and favours rendering and incineration followed by licensed landfill, then pyre burning with on farm and mass burial as equally least favoured. Air curtain burners, used under emergency powers, have now been subject to emission testing and their future use will be considered once the test results are available.
- 3.1.23 Current interim contingency arrangements provide for immediate use of fixed plant incineration under the umbrella of a RPA contract with incinerator companies and with agreed biosecurity protocols. Rendering, under a similar contract, will come on stream within 48 hours, if the scale of outbreak is estimated to exceed the limited incinerator capacity and full biosecurity arrangements at the plants can be implemented.

Future Plans

- 3.1.24 A full cost analysis of all the means of disposal used in this epidemic is being undertaken to provide a sound financial input to further considerations on a future hierarchy of disposal outlets. This will augment the legislative, environmental and public health issues that are already in consideration. All the issues that have arisen in this epidemic are of course relevant:- the effect on tourism of images of pyres, the public health and nuisance issues related to burn and mass burial sites, the effect on local communities of mass burial sites and the major environmental management tasks that need to be addressed in relation to them; and the environmental, public health and legal constraints on burial and burning on-farm.
- 3.1.25 In addition, there has been considerable scientific assessment of the methods used; modelling and monitoring of the plumes from burn sites, work on dioxin emissions from pyres, tests on the efficacy of air curtain burners and ongoing monitoring of public health issues in relation to disposal workers. More work in these areas may need to be considered.
- 3.1.26 A key element of future contingency planning will be consultation between DEFRA, GOs, local authorities and regional stakeholders to develop local disposal contingency plans. This will include consultation and agreement on the methods of disposal most suited to the locality, the use of local disposal facilities such as rendering and incineration and also the use of licensed commercial landfill. Local consultation will also need to address the location of strategic carcase collection centres and lorry parks that would be employed in the event of another major disease outbreak. Contingency plans will also involve 'agreements' with hauliers to provide appropriate biosecure transport for the haulage of carcasses to disposal sites at agreed rates. These arrangements will ensure that carcasses are only transported in leak-proof vehicles and that lorries normally used for the transport of grain or feed are not used.

Legislative Provisions

- 3.1.27 Future disposal plans also need to address proposed changes in legislation, in particular the impending EU Animal By-Products Regulation and the implementation of the Pollution Prevention and Control (PPC) Act 1999. These regulations would severely curtail the disposal routes utilised during the FMD outbreak.
- 3.1.28 Under the provisions of the proposed Animal By-Products Regulation due to be implemented by the end of 2002, disposal in both licensed landfill and mass burial sites would be prohibited, since the general

provisions state that Category 1 material (animal by-products as specified in article 4, including whole carcasses) shall only be disposed of by incineration or rendering.

A derogation is detailed in article 24(c) states that the competent authority may, where necessary, decide that:-

*“animal by-products may be disposed of as waste by burning or burial **on site** in the event of an outbreak of a disease mentioned in List A of the International Office of Epizootic Diseases (OIE), if the competent authority rejects transport to the nearest incineration or processing plant because of the danger of propagation of health risks or because a widespread outbreak of an epizootic disease leads to a lack of capacity at such plants.”*

3.1.29 Initial discussions suggest that the ‘on-site’ stipulation would rule out mass burial sites and licensed landfill sites as disposal options for any future outbreak.

3.1.30 A further issue relating to the use of licensed landfill, which remains unresolved, is that Government only has powers of direction whilst landfills are controlled under Part II of the Environmental Protection Act 1990. Existing landfills will gradually become subject to the Regulations made under the PPC Act 1999 to transpose the Landfill Directive - and the power of direction will be lost. The Landfill Regulations will apply immediately to new landfills and existing landfills will be subject to them during the period 2003-2007.

3.1.31 DEFRA is addressing all these issues to ensure that sufficient disposal capacity would be available in the event of another major outbreak.

Cleansing & Disinfection

3.1.32 During the FMD outbreak secondary cleansing and disinfection was undertaken on some 7,116 farms. Procedures for this work are being reviewed and amended in the light of experience. In particular, procedures will reflect the need to ensure that secondary C&D is proportionate to the size of the holding and potential risk of virus spread, as well as reflecting the contract management arrangements and tighter contractual provisions implemented after review in August.

3.1.33 Current guidance on the disposal of seized materials and other C&D wastes recommends burning and burial on site in keeping with existing farming practices. This practice will however be prohibited under proposed Animal Waste Regulations which will fully implement the EU

Animal Wastes Directive. This will mean that all non-organic waste arising on farms will become controlled wastes and will need to be disposed of in accordance with the Waste Management Licensing Regulations 1994. The C&D element in the SVS instructions will be amended to reflect these changes in regulation.

Animal identification and movement controls

- 3.1.34 The FMD epidemic has reinforced the importance of establishing individual identification of sheep and the UK is supporting the EU Commission's moves to improve identification and tracing of sheep. It is strongly in favour of electronic identification, as the large numbers involved together with the difficulties of tracing and recording individual sheep using numbers on ear tags and paper based records make any manual system of sheep tracing impractical. As part of the interim movement regime, the UK has put in place a system of recording movements between flocks using eartags, but not individual identification. The UK will continue to participate fully in discussions in the EU.
- 3.1.35 The current interim movement regime, introduced in February 2002 is based on a 20 day standstill period for sheep and cattle, as is already in existence for pigs. The value of this period in relation to disease control will be monitored during the life of the scheme. For the present, veterinary advice is that the 20 day standstill should apply to the entire holding when animals are brought on, rather than just to the incoming animals themselves. DEFRA has undertaken to carry out a formal veterinary risk assessment and a parallel economic assessment of the 20 day rule before reaching a view on future policy in this area. It is hoped that the recommendations of the Inquiries will be available in time to inform these policy decisions.

Effective Communication

- 3.1.36 It was apparent during the epidemic that there was a demand for straightforward and timely communication on all aspects of the disease, its control and its impact on the countryside. There is no easy way of achieving such communications at a time of crisis, but there is a need to ensure that all avenues are explored to improve the information that can be given, its accuracy, and the speed at which it is provided.
- 3.1.37 DEFRA is striving to improve public communications and to provide information that is always timely, factual and clear, to demonstrate openness and provide accessibility to information and to key personnel. It is particularly important that all those within Government who provide

information to the public, whether Ministers, RODs at local stakeholder meetings or case officers managing a cull on a farm should be well informed, up to date and able to explain the policy that is being implemented. There were problems during the outbreak in ensuring that all parts of DEFRA were fully informed and able to present a clear story and these are being addressed.

- 3.1.38 Much was achieved during the epidemic, both centrally and regionally, and the developments will be reinforced, both to ensure good communications internally and clear messages being available for communication externally. There are also lessons to be learned in relation to action that should be taken to present Government policies abroad when the UK media is concentrating on negative stories, and being picked up overseas. In this case effort needs to be directed to communications which provide positive information focused on the particular concerns of individual countries. In all these areas, efforts begun during the epidemic will be maintained.

Management Information

- 3.1.39 The battle against the outbreak was conducted in a very public arena and there was a constant demand for accurate, detailed and timely information on all aspects of the disease control operation. Much information was provided to the website and to Ministers, MPs and the public. However, the Disease Control System could not always easily provide the management information required; and as it had been developed solely in relation to disease control, it could not easily be integrated with the financial management system which was subsequently and separately developed. All these issues are now being addressed with the aim of producing an integrated system which takes full account of the need for detailed management information across all aspects of a disease and its control. Work is also in hand in DCCs to record, through process mapping, the many and complex operations necessary in disease control on this scale which will provide input to future contingency preparations. Concerns about the problems encountered in deploying mass IT management systems in laboratories which normally dealt with research, rather than volume processing of serology tests, means that this is an area where further work is necessary if serology is to be successfully employed in a future outbreak.

- 3.1.40 One aspect of the IT systems used during the outbreak, that worked particularly successfully and is being strengthened, is the work on Geographic Information Systems (GIS). This provided valuable locational data, demonstrated the benefits of bringing separate databases together into graphical representations and, by the production of high

quality and specific maps, greatly helped the effort to deal with the disease and to explain that effort to others. The SVS team has been enlarged and more development will be taking place.

- 3.1.41 The Countryside Agency is working to help local authorities improve the quality and clarity of public information on countryside access, it is also looking at the feasibility of a National Countryside Access database, available on the internet, giving up to date information on rights of way and areas of land open to the public. Although these initiatives serve a more general purpose, they will be available to provide information quickly in the event of animal disease.

Independent and Open Scientific Advice

- 3.1.42 The policies adopted to eradicate FMD were based on veterinary and scientific advice. In line with the recommendations in the Phillips Report on the BSE Inquiry, effort was particularly directed to ensuring that this included advice from independent veterinarians and scientists, and was fully explained in the public domain. The CVO, in developing his veterinary advice, drew on the knowledge and expertise of staff in the SVS and at the Veterinary Laboratories Agency, including veterinary epidemiologists. He also held regular weekly meetings with senior representatives of the veterinary professions at which the disease and control methods were discussed. From the early stages, he explained the veterinary advice that he was giving to Ministers and stakeholders in media briefings. The CVO established early on a veterinary risk assessment team. The team's veterinary risk assessments, which provided the basis for taking decisions on re-opening footpaths, allowing hunting to resume and allowing other country activities to start again were made public on the DEFRA website.

- 3.1.43 In line with the Phillips Report's recommendations for developing independent scientific advice and greater openness of government scientific data, the Chief Scientific Adviser established an FMD Science Group. This included three teams of university based epidemiological modellers, as well as government veterinary epidemiologists, veterinary experts, serologists, practising vets and logisticians, amongst others. Advice from the CSA, which arose from discussion in this group, played a significant role in the development of culling policies, slaughter targets and other policies to control the epidemic. The advice from the group was, wherever possible, explained by the CSA in media briefings.

- 3.1.44 The nature of the subject and the speed with which epidemiological advice was required meant that the Science Group could not be appointed in accordance with usual procedures. The Inquiry's views on

how independent scientific advice might best be provided and built into the decision making process in such circumstances would be valuable.

Engagement with Other Countries

EU - Controlling the Disease

- 3.1.45 One of the main lessons that was appreciated and acted upon very early in the epidemic was the importance of engaging fully and openly with other Member States, the EU Commission and the Standing Veterinary Committee. The Committee was kept fully informed of developments in the disease control measures and this proved to be very useful as active participation enabled decisions to be taken promptly which were of direct assistance during the outbreak. The Commission also showed a willingness to be flexible and draft decisions at short notice e.g. to endorse plans to grant the UK the right to vaccinate cattle in Cumbria and Devon, if necessary.
- 3.1.46 As the epidemic waned and ended, the positive engagement with the SVC contributed to the timely lifting to EU restrictions on the export of animals and carcasses. This also contributed to the OIE's declaration of 22 January that the UK had FMD free status.
- 3.1.47 The December conference on FMD, organised by the UK, the Netherlands, Belgium as holder of the EU Presidency and the Commission demonstrated the value of an international forum for discussing and taking forward consideration of issues such as vaccination. The outcome of this conference will feed into the negotiation of a Council Directive to replace Council Directive 85/511/EEC introducing Community measures for the control of FMD on which work was under way before the recent outbreak. In this, the Government will take into account the findings of the Inquiries into FMD.
- 3.1.48 Once a new Directive is agreed it will be important to ensure that it is fully and speedily implemented in UK law and that the FMD contingency plans are revised to take full account of any changes that may arise from the new Directive.
- 3.1.49 Engagement with other Member States helped secure veterinary assistance from EU as well as from US, Canada and Australia.

Impact of the Disease Internationally

- 3.1.50 As the overseas impact of FMD became increasingly apparent FCO overseas posts were engaged in a huge campaign aimed at countering the impact on international tourism. The FCO fed advice into other departments (through COBR, Cabinet and correspondence) on a range of presentation issues of particular relevance to foreign concerns: such as whether the disease affected humans; whether there were food shortages in the UK; whether the disease could be transported back to their countries. There was a need to address concerns that all possible measures were being taken to control the outbreak while not implying that the countryside was closed. Other overseas activity was affected, ranging from military training (Canada) to school exchanges (Europe) to non-risk exports of UK agricultural products like fish (to Russia) and grain (to North Africa). In each case British Embassies were mobilised to counter the damaging effect of misconceptions about FMD.
- 3.1.51 The co-ordinated response overseas was effective. Embassies immediately cascaded information and guidance to consulates general and other UK relevant offices. Many embassies in key tourism revenue countries held regular meetings with the British Tourist Authority, British Council, British Chambers of Commerce, British airline carriers etc. to co-ordinate their response. Embassies agriculture, trade, defence and press and public affairs officers were frequently working together on integrated strategies for responding for FMD.

SECTION 2

ACTION ALREADY TAKEN

- 3.2.1 Action has already been taken in some areas where the need for change has been identified. These include the swill feeding ban, the introduction of the Animal Health Bill, increased efforts to stop illegal imports of meat and meat products, and efforts to improve biosecurity on farms.

Swill Feeding of Pigs banned from May 2001

- 3.2.2 From early in the epidemic there was speculation that the practice of feeding swill to pigs was a cause, or the cause, of the outbreak. The farm at Heddon-on-the-Wall, which is now believed to be the source farm of the epidemic was licensed to feed swill to pigs.
- 3.2.3 In response to this assessment of the origins of the disease the Minister of Agriculture, on 27 March, announced in the House of Commons that he was proposing a ban on the use of swill feeding. There were existing statutory controls which made it an offence to feed swill to livestock unless it had been processed in compliance with prescribed requirements and licences were required to process and to feed processed swill to livestock. While acknowledging that if the statutory conditions for feeding swill were complied with i.e. heating at 100°C for one hour, it did not present a risk of transmitting foot and mouth disease or other similar pathogens, the potential gravity of the consequences of even one case of inadequately processed swill being fed to livestock was assessed as greater than the benefits to the relatively small number of premises which continued to use swill feeding. A public consultation document was issued on 27 March seeking the views of all interested parties on the principle and detailed application of such a ban.
- 3.2.4 Consultation on the proposals led to a new Order being made on 3 May. The principal effects of the Order were:-
- (a) A ban on the production and feeding of swill from catering waste which contained meat or meat products or products that had been in contact with meat or meat products;
 - (b) A ban on the use of poultry slaughter house waste and fish waste in swill;
 - (c) To maintain a ban on the access to livestock of any catering waste imported into Great Britain and originally

intended for consumption on the means of transport in which it was imported, or any feedingstuffs which had been in contact with it.

- 3.2.5 The ban came into effect on 24 May after a three week phase-in period designed to ensure that animals could be safely weaned off waste food on to an alternative diet.
- 3.2.6 This tightening of the legislation in relation to animal feeds is intended to close one of the channels through which potentially infected food might infect animals in GB.

The Animal Health Bill

- 3.2.7 It is already clear that there are some problems with the regulatory and legislative framework within which we tackle major outbreaks of animal disease. The Bill therefore picks up a number of issues that arose during this epidemic. The Animal Health Bill (which amends the Animal Health Act 1981) was introduced to the House of Commons on 31 October 2001. It is an enabling Bill which *inter alia* extends the range of powers available for combating foot and mouth disease. It does not, however, presuppose that any one method of disease control is preferable to another. The Bill contains new provisions relating to slaughter, vaccination and testing, and provides for the better enforcement of such powers. Should the need arise, these provisions may be extended to diseases other than foot and mouth by order of the Minister (subject to the approval of both Houses of Parliament).
- 3.2.8 The Bill results from the realisation that in some circumstances the disease control powers contained in the Animal Health Act 1981 were insufficient to take swift and effective action to prevent disease spread and from the consideration that there could be a long 'tail' of low numbers of new cases as well as a likelihood of localised resurgences as the Autumn movements took place.
- 3.2.9 The wider slaughter powers provided for in the Bill allow animals to be slaughtered on preventative grounds if there is scientific, veterinary and epidemiological evidence that it would limit the spread of disease. This differs from existing measures in that it provides for the possibility of culling animals in a wider range of circumstances than is at present possible e.g. for a firebreak cull.
- 3.2.10 The Government recognises the need, so far as reasonably practicable, to implement the new provisions openly and transparently, in the light of an effective dialogue with stakeholders. Farmers and others need to be

assured that the new slaughter powers will be applied proportionately, taking due account of risks. This is why consultation is currently taking place on the criteria that will determine how and in what circumstances the option of slaughtering under the new powers would be justified. In light of the comments a slaughter protocol will be published setting out clearly how the new powers will normally be used and the procedure for seeking review of a slaughter decision. Revised instructions to veterinary staff on how to implement the powers in line with the approved criteria and procedures will also be published.

- 3.2.11 The Bill also strengthens the option of using vaccination for disease control. The Bill contains a new provision allowing vaccinated animals to be slaughtered, where appropriate, and requiring compensation to be paid for slaughtered vaccinates.
- 3.2.12 The Bill also provides new powers of entry to slaughter, vaccinate, or blood test animals. Currently if a farmer refuses access to his/her farm, DEFRA has to obtain a court injunction to gain entry. The Bill will enable DEFRA to apply for a warrant from a Justice of the Peace thereby reducing delay and ensuring a speedy slaughter/vaccination/testing process when necessary.
- 3.2.13 In the recent outbreak some farmers initially refused access to their farms. Although often resolved at the local level, with stock slaughtered or tested, the resultant delays contributed to failures to meet the 24/48 hour slaughter targets. The new powers will allow rapid action when required which the epidemiological evidence shows is vital in controlling the spread of disease.
- 3.2.14 In addition to the new powers of slaughter, vaccination and testing the Bill provides for the adjustment of compensation that is payable in respect of animals slaughtered on Infected Premises, taking account of compliance with biosecurity measures. This would be based on the requirement that all farmers on Infected Premises would automatically be entitled to 75% of the market value of the animals slaughtered. The remaining 25% will be subject to an assessment of the farmer's compliance with biosecurity requirements. This is to encourage high standards of biosecurity amongst farmers, thereby reducing the risk of spread of disease, and reflects the lessons learned in this epidemic in relation to the importance of biosecurity in controlling the spread of the disease.
- 3.2.15 Another feature of the Bill is the creation of a new offence of deliberate infection of an animal. This applies to a number of animal diseases including foot and mouth disease. If convicted, a person found guilty of

deliberate infection would be liable to imprisonment for a term not exceeding two years or to a fine or to both. They would also be disqualified from keeping animals for a specified period.

3.2.16 The Bill also provides measures for the eradication of scrapie from the national flock.

Controls on the imports of meat and meat products

3.2.17 Concern has been voiced, particularly by the NFU during the outbreak, and more recently by many other organisations, about the apparent ease with which meat and meat products can be brought illegally into this country. The FMD epidemic has drawn attention to the potential for exotic diseases to be brought in with such imports. The Government is therefore taking steps to tighten these controls.

3.2.18 Imports of meat into any EU state from a third country must conform to EU rules, which require strict conditions and veterinary certification. In addition meat consignments must be presented on arrival to a Border Inspection Post (BIP) where all consignments are subject to documentary and identity checks and at least 20% of consignments undergo physical checks. The performance of BIPs is audited by the European Commission's Food and Veterinary Office and monitored by DEFRA.

3.2.19 DEFRA is leading interdepartmental consideration of the problem of illegally imported animal products. Port Health Authorities are being encouraged to exercise greater vigilance in all their checks of imported consignments. The Food Standards Agency, which is responsible for public health aspects of such imports and for imports of other food products, has written to the local authorities to ask them to pay particular attention to retail outlets in case illegally imported products are on sale.

3.2.20 It is recognised that there are illegal imports of meat, both by individual travellers bringing small quantities in their luggage, but also by traders hiding meat in containers ostensibly holding other products. Detection in both these cases depends on spot checks, usually by Port Health Officers and HM Customs.

3.2.21 The Government has already taken steps to improve action against this smuggling activity. These steps fall under four headings:-

- Increased public awareness. Hard hitting posters at main airports and ports, advising passengers of our import rules, information provided to travellers before departure via UK

Embassies, airlines and travel agents. Action for in-flight initiatives being taken forward e.g. video, public announcements;

- Increased enforcement powers;
- Improved intelligence gathering and sharing of information;
- Risk assessment - a risk assessment has been commissioned to analyse the probability of illegal imports of animal products, the probability of such imports being infected with FMD and other List A notifiable diseases, and the probability that any infected illegal imports will reach susceptible livestock. This information will be used to better target enforcement resources.

3.2.22 Urgent consideration is being given to the possible use of detector dogs and x-ray machines at ports and airports.

Biosecurity controls

3.2.23 Control of foot and mouth disease has always depended on following tight rules in relation to biosecurity, ensuring cleansing and disinfection rules are scrupulously followed and that the movement of vehicles, people and animals comply with requirements. During this epidemic the importance of maintaining biosecurity has become a major issue. Good biosecurity for cattle could mean their exemption from the contiguous cull under the refinements issued in April. The CVO emphasised its importance by issuing a biosecurity video to all farmers at the beginning of July with eight key messages:-

“Keep livestock separate;
Deal with sheep last;
Keep yourself clean;
Keep the farm secure;
Keep unnecessary vehicles away;
Clean and disinfect;
Avoid visiting other farms;
Look for early signs of disease.”

3.2.24 The importance of biosecurity was also emphasised in relation to:-

- Forms, in particular forms A&D, served under the Foot and Mouth Disease Order 1983 which impose stringent

biosecurity requirements in relation to the premises to which the forms apply;

- Movement licences. From 13 July it became a condition of every movement licence that strict biosecurity measures should be taken with vehicles and personnel. Elliott Morley made plain, in announcing the necessity of meeting high standards of biosecurity when applying for licences to move livestock that “Compliance with high standards of cleansing for vehicles and operators will be a condition of each licence. Where biosecurity standards are clearly insufficient we will look at the case for refusing further applications for such licences.”;
- Cleansing and disinfection. When this was restarted on 4 August following the review of the costs and contractual arrangements, it was announced that DEFRA reserved the right to withhold payment of all or part of the costs of C&D in some clearly defined circumstances, including where biosecurity failures were shown to have led to the disease on the farm;
- Restricted Infected Areas. When these were introduced in the disease hotspots very high standards of biosecurity were required of milk tankers, grain lorries and all vehicles visiting farms. These strict controls proved effective and would be implemented immediately in any recrudescence or new outbreak;
- Compensation for slaughtered animals. The importance of biosecurity is also drawn out in the Animal Health Bill in relation to the proposed terms for compensation for slaughter.

3.2.25 In all these moves the Government has demonstrated its commitment to emphasising the important lesson that it is only by good biosecurity that adequate disease control can be maintained. This is a lesson that must be learnt by the whole farming community if outbreaks of disease are to be avoided.

SECTION 3

STRUCTURAL AND ORGANISATIONAL CHANGES

Civil Contingencies Secretariat (CCS)

- 3.3.1 The CCS was established in July 2001, and reports to the Prime Minister through the Cabinet Secretary. It was established because the experiences of the fuel protests, the floods in the winter of 2000 and the outbreak of foot and mouth disease highlighted the fact that the Cabinet Office was in the best position to draw together and co-ordinate the different strands of Government activity which came into play in difficult situations, emerge relatively quickly and have implications that go beyond the responsibilities of single Departments. Responsibility for the political and strategic direction of any emergency or of any future outbreak of disease would depend on its scale and the resources necessary to deal with it. Decisions on such matters would be taken at the time.
- 3.3.2 The CCS is a co-ordinating body and centre of expertise set up with the aim of improving the resilience of central government and the UK. Its purpose is to make the country more effective in planning for, dealing with and learning lessons from emergencies and disasters. The secretariat can provide integrated planning and thinking and co-ordinate action across departments. Its tasks are to identify potential crises; to help departments pre-empt or handle them; and to manage any necessary co-ordination machinery.

The Creation of DEFRA

- 3.3.3 DEFRA was created after the election in June 2001 to bring together the responsibilities of the Ministry of Agriculture, Fisheries and Food for farming, fisheries and the food chain with the responsibilities of the Department of Environment, Transport and the Regions for other aspects of the rural economy and environmental protection. This acknowledged the inter-relatedness of all aspects of the rural economy and by bringing together all rural and agricultural policy in a co-ordinated and coherent whole will help ensure that the development of policy on one aspect takes full account of that aspect's impact on other policies. The aim and objectives of the new Department will help to ensure that all aspects of rural life and the environment are brought fully into consideration in dealing with any future outbreak of animal disease.

Clear Lines of Management

- 3.3.4 In July 2001, as part of the restructuring following the creation of DEFRA a new post of Director General of Operations and Service Delivery was created, to focus, at Management Board level, on issues concerning customer service and delivery.
- 3.3.5 From 1 October 2001 the Veterinary Field Service - which comprises all the vets and supporting technical and administrative staff in Animal Health Offices headed by the DCVO-Services - reports to the Director General for Operations and Service Delivery (DGOSD) and no longer to the CVO. This is shown in the organogram at Figure 4, following paragraph 2.1.6. This change will mean that the whole of the veterinary operation in the field will report through a clear line to the DGOSD and establishes a management structure that will allow internal communications to be more direct, simpler and faster. The CVO will remain head of profession and is now the Director General of Animal Health and Welfare responsible for policy on all animal health, welfare and veterinary matters. In the event of any future disease outbreak the whole operation in the field would be set up within the command of the DGOSD with the focus on ensuring effective delivery. Not only is the command structure in an emergency important, but, in particular, the need for effective communication is paramount.
- 3.3.6 More generally this change creates a structure to enable DEFRA to improve the delivery of its service by bringing together, under the DGOSD, the two largest field delivery organisations in core DEFRA - the SVS Field Service and the Rural Development Service (RDS). The change will promote joint working, a more integrated and co-ordinated service to key customers, more integrated IT and a shared use of premises and support. It will help to design more resilient structures and improve emergency response arrangements. Many of these advantages were apparent during the FMD epidemic and the co-operative working arrangements established then have contributed to this change in structure.

A broad Departmental basis for tackling major problems

- 3.3.7 Engaging all Government departments that are able to make a contribution is vital in tackling major problems. This was demonstrated during the FMD epidemic by the willingness with which Government Departments provided staff to support the DEFRA offices across the country and in London, and put the need to meet their departmental targets on hold while the major objective of dealing with FMD was addressed. This is an area where the experience needs to form the basis

for ensuring such an approach in future, and the CCS are working to ensure that this will be the case.

Co-ordination Across Government Departments

- 3.3.8 The establishment of the JCC was a response to the need for greater co-ordination across Government Departments and within MAFF - between the field and HQ. The involvement of the armed forces, of many departments and outside organisations including the NFU, and the establishment of the Birdtable as a rapid, but effective means of keeping everyone up to date and ensuring rapid and integrated action on operational issues made the JCC a success, which will be repeated in future animal disease outbreaks. It is included as an immediate element of the interim contingency plan.

Engaging other Organisations

- 3.3.9 During the epidemic the relationship between those directly involved in fighting the disease in DEFRA, both in local centres and in London, and those involved in environmental protection and public health developed and became increasingly effective, setting a basis for further integrated activity in future. Similarly the close working with local authorities, through their enforcement role and licensing work, with the DEFRA policy groups and local farming, food and rural stakeholders has built a basis for future work. The contingency planning now being undertaken provides that such liaison and co-operative working should be taking place at all times so that in an emergency all parties involved will understand their roles fully and be able to act in the most effective way.