

PART 2

This part provides an account of Government structures, policies and operations relating to the key questions in the Inquiry's Framework Document. Material relating to Key Question 3 is supplied first to provide the structure within which information relating to the other questions can be most usefully presented.

SECTION 1

THE ROLE OF GOVERNMENT AND OTHER PUBLIC AUTHORITIES

The Prime Minister and the Cabinet Office

- 2.1.1 This section covers the roles of the Prime Minister and the Cabinet Office, MAFF/DEFRA, MoD, Government Offices in the Regions, DH, and other Government Departments and Agencies, local government, the police service and the devolved administrations.
- 2.1.2 At the beginning of the outbreak MAFF took the lead in directing and co-ordinating the Government's response to the outbreak. The Prime Minister was closely engaged, receiving regular briefings on the development of the outbreak and the control strategy, holding meetings with Ministers, the farming industry and wider rural interests. Once the national scale of the outbreak was clear, the Prime Minister with the Cabinet and the Minister of Agriculture oversaw the development of policy.
- 2.1.3 The Cabinet Office chaired meetings of officials on particular subjects from the first week of the outbreak and organised several meetings of an ad hoc Ministerial Committee on Foot and Mouth in the early stages. From 22 March, when the Cabinet Office Briefing Room (COBR) was opened, until September, disease strategy and operations, but not policy issues, were overseen by COBR, chaired initially usually by the Prime Minister or Secretary of State for Defence and later by MAFF/DEFRA Ministers, and consisting of Ministerial or official representatives of all relevant departments and agencies. The Economic and Domestic Secretariat provided secretariat support for COBR meetings, recording the decisions of each meeting and following up delivery of action points agreed at the meetings. COBR met on a frequent basis throughout the epidemic to discuss issues relating to the operational aspects of co-ordinating the fight against Foot and Mouth Disease.

- 2.1.4 Within the COBR framework, Cabinet Office officials chaired a number of meetings, for example looking at the contingency planning for various vaccination options. Separately, individuals from the Cabinet Office Secretariat helped to support officials from other Government Departments by co-ordinating and preparing policy analyses for Ministers on a number of subjects, e.g. vaccination policy.

MAFF/DEFRA

- 2.1.5 DEFRA, and MAFF before it, is responsible for dealing with animal health matters, including an outbreak of FMD, which is a notifiable disease of animals. DEFRA is also responsible for all aspects of the environment and countryside and for the sponsorship of the agriculture and food industries. This department therefore took the lead on FMD policy and operations.
- 2.1.6 In February 2001, as shown in the organogram at Figure 2, the line of responsibility at official level in relation to foot and mouth disease within MAFF was headed by the Permanent Secretary, to whom reported the Head of Animal Health and Environment Directorate to whom in turn reported the CVO, Head of the SVS and responsible for veterinary advice, and the Head of Animal Health and Welfare Group, responsible for policy. Reporting to the CVO were the Deputy Chief Veterinary Officer (DCVO) Policy, responsible for veterinary policy in MAFF HQ and liaison with the EU Commission and the OIE, and the DCVO Services, responsible for veterinary services in the regions and all the vet staff responsible for implementing policy advice and operational instructions. The organograms at Figures 3 and 4 show the changes in structure made in response to the outbreak and are explained at paragraphs 2.3.14 and 3.3.5.
- 2.1.7 The SVS has responsibilities in relation to the prevention and control of animal diseases, farm animal welfare, livestock protection, veterinary medicines and export promotion. Under concordats with the Scottish Executive and National Assembly for Wales the SVS provides the national veterinary service for the whole of Great Britain and the CVO has overall responsibility for veterinary advice to Ministers and administrative counterparts in England, Scotland and Wales. In Scotland and Wales, Assistant Chief Veterinary Officers (ACVOs) provide day to day veterinary advice to their devolved Ministers.
- 2.1.8 Animal Health Group held the main responsibility for FMD policy and for animal welfare policy, working in close liaison with the CVO and veterinary policy advisers at HQ. Within the Group, Animal Disease Control Division was most closely involved with FMD eradication

policy and needed to be significantly reinforced as the scale of the outbreak grew. Animal Welfare Division was involved in the development of the movement of animals under licence for welfare purposes, the LWDS and other aspects of animal welfare which resulted from the FMD outbreak.

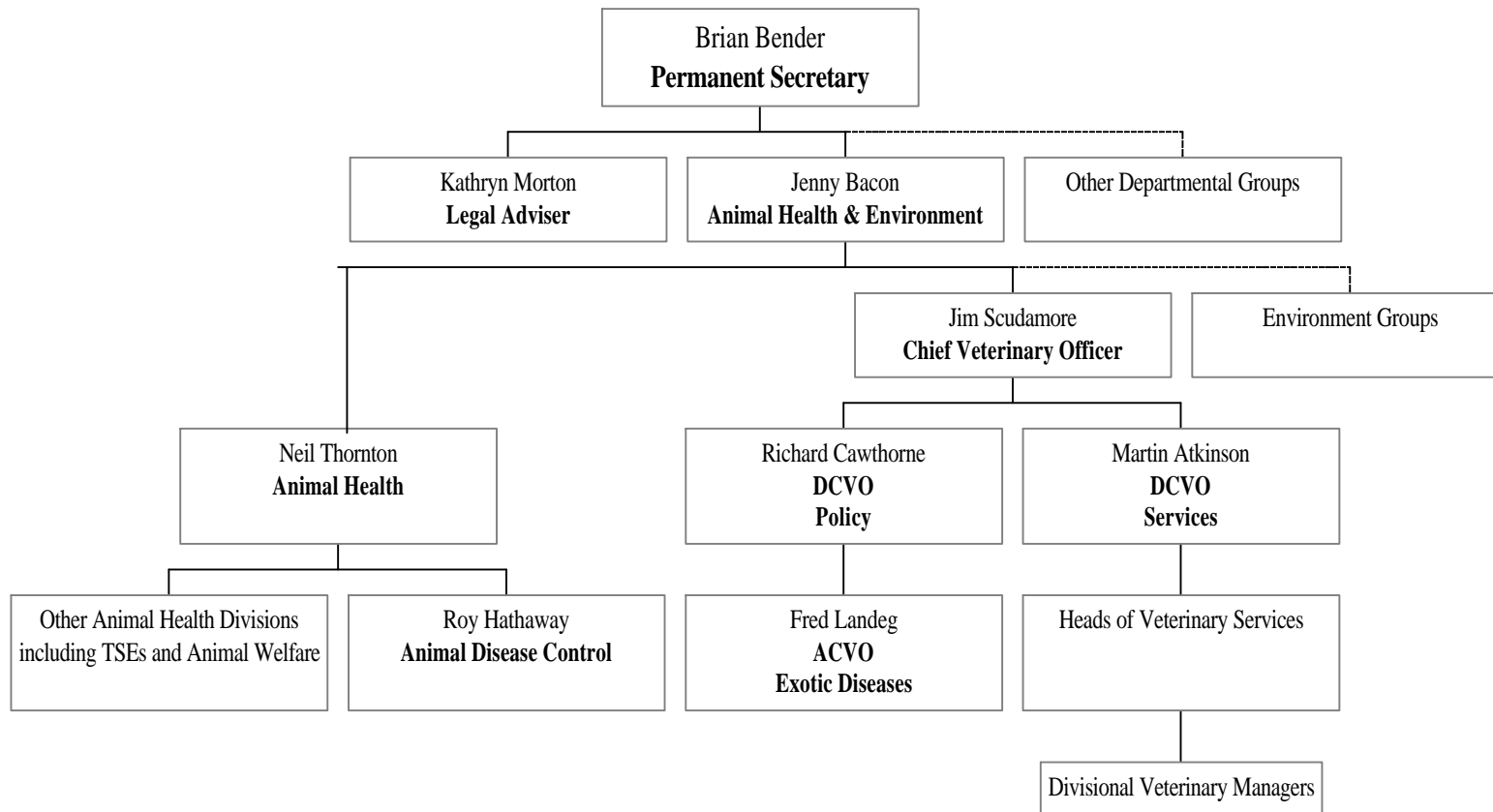
2.1.9 This structure was augmented in March when the Joint Co-ordination Centre (JCC) was established to co-ordinate operations and Regional Operations Directors were appointed to support the veterinary effort in the field. The Director of the JCC and the RODs reported to the Head of Animal Health and Environment Directorate. In the later months of the epidemic the RODs reported to the Director of the JCC. (See also Section 3).

2.1.10 Other parts of MAFF, and then of DEFRA, involved in dealing with the FMD epidemic were:-

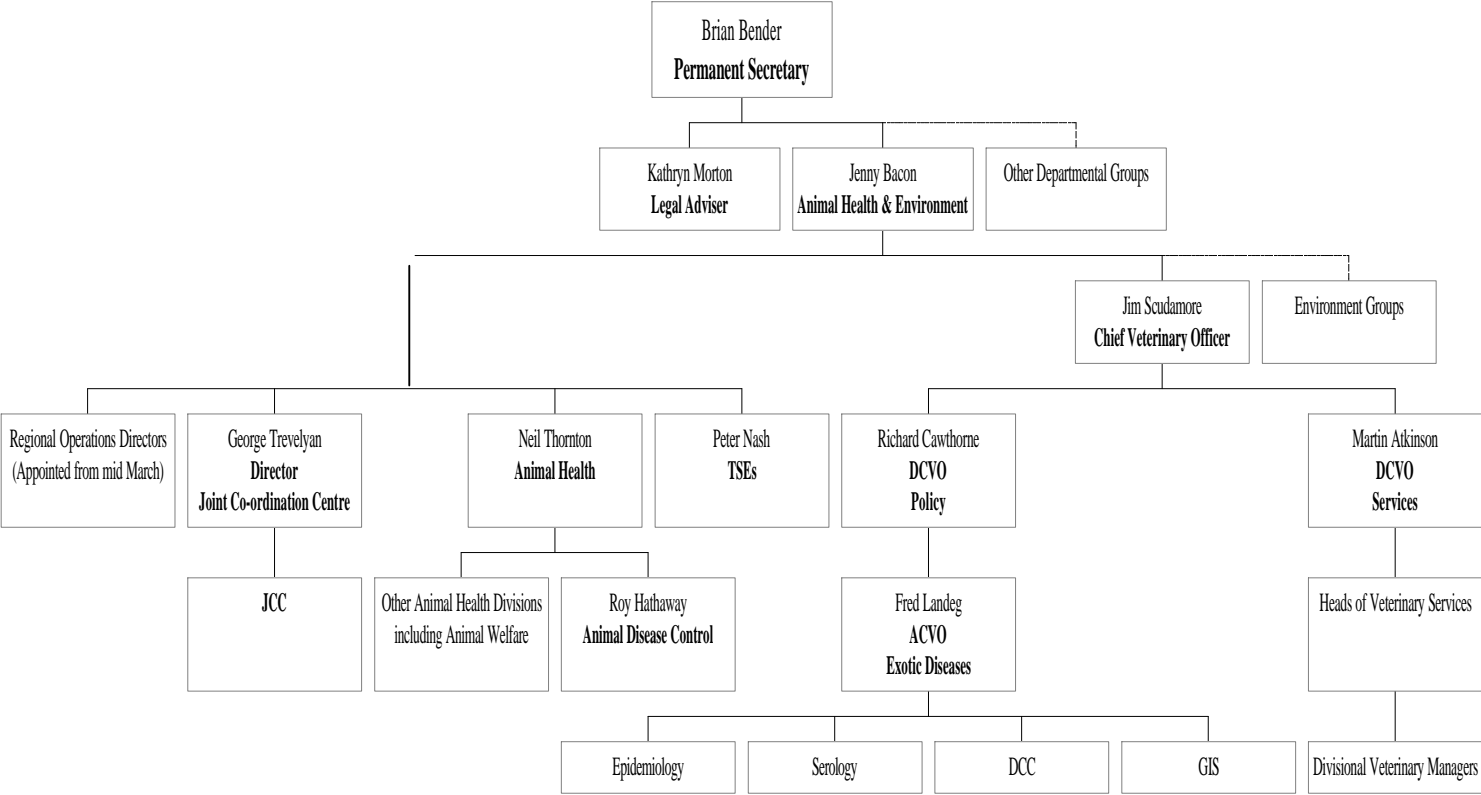
- Policy Divisions dealing with agriculture. Apart from the impact on the livestock industry generally, appropriate adjustments had to be made to livestock subsidy schemes within the Common Agricultural Policy (CAP). In addition, these Divisions were, with advice from animal welfare staff in the SVS, responsible for the creation and direction of the Livestock Welfare Disposal Scheme. Even those dealing with arable crops contributed, e.g. by ensuring the continuation of grain exports and securing derogations from the CAP arable payments regime to allow land set aside from agricultural use to be used for grazing.
- Legal Services Directorate General which provided legal advice, drafted relevant statutory instruments, vetted licences and contracts, undertook litigation, advised on enforcement issues and provided a continuous JCC presence.
- Corporate services such as those dealing with personnel, health and safety, IT and building and estates management all played a significant role.

2.1.11 The regional organisation of MAFF was in the process of restructuring as the Minister had announced in July 2000. The Farming and Rural

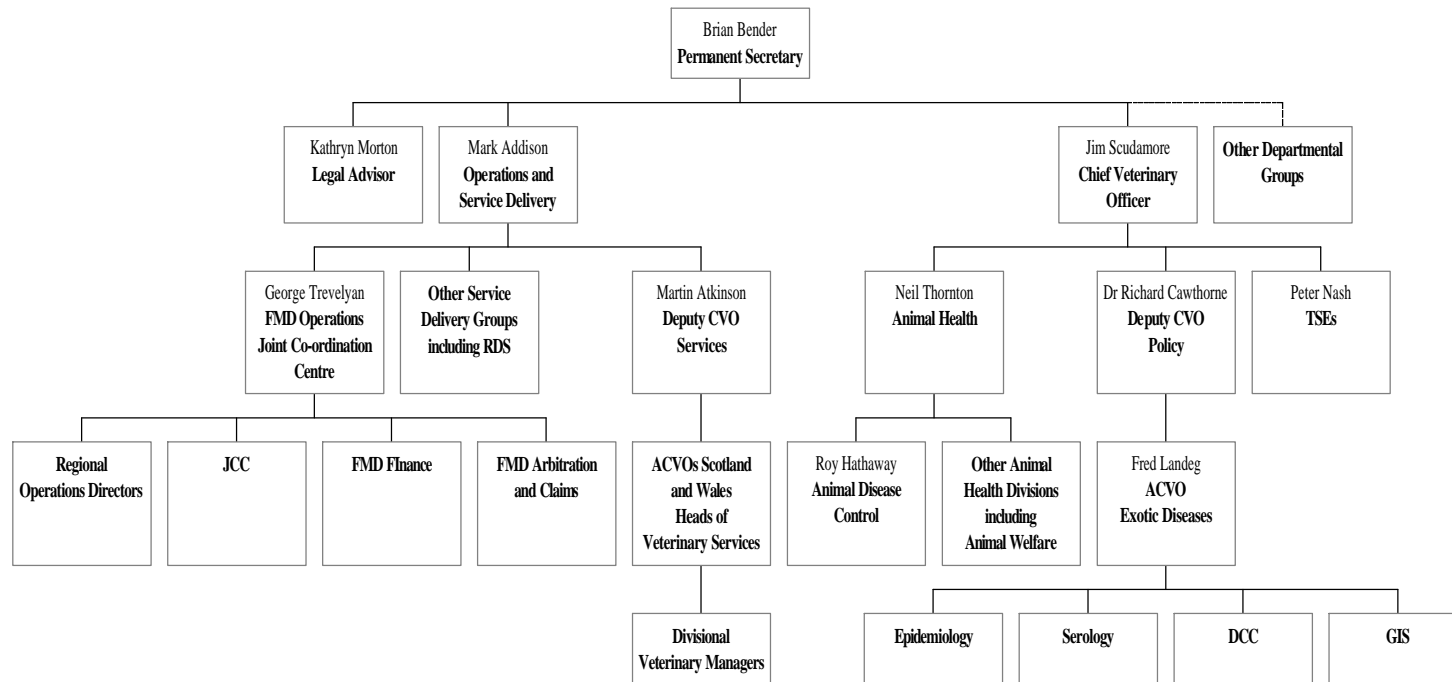
MAFF Animal Health Responsibilities prior to FMD (Figure 2)



MAFF FMD Control February / March 2001 (Figure 3)



DEFRA FMD Control October 2001 (Figure 4)



Conservation Agency (FRCA) was set to return to core MAFF as the Rural Development Service (RDS) on 1 April; the work of the Regional Service Centres was being divided up with some going to the RDS and some amalgamated with the work of the Intervention Board to become the Rural Payments Agency, which formally came into being on 16 October 2001, operating from far fewer sites across the country. Certain strategic functions previously carried out by the RDS and Regional Service Centres were being transferred to the Government Offices for the Regions. Work was being transferred from one office to another, some offices were closing while others expanded, staff were moving to new organisations and offices and they felt considerable uncertainty about the future. Nevertheless there was great willingness on the part of staff affected by these changes, and those working in outstationed headquarters offices, to join the effort to eradicate FMD.

2.1.12 Agencies of MAFF and other related organisations were also actively involved. A number of agencies loaned staff to support DCCs and the HQ effort. Significant contributions were made by:-

- The Intervention Board, (a Non-Ministerial Government Department) which became part of DEFRA's Rural Payments Agency (RPA) on 16 October 2001, was responsible for delivering the LWDS, and played a major part in organising disposal of FMD carcasses.
- The Farming and Rural Conservation Agency which became the Rural Development Service (RDS) on 1 April 2001. With the suspension of visits to farms for the purposes of the various agri-environment schemes and dairy hygiene inspections, the RDS assisted in the administration of the various schemes of licensing movements of animals for welfare purposes until the task was passed to local authorities in the autumn. The RDS also provided business advice and organised seminars for affected farmers.
- The Veterinary Laboratories Agency (VLA) provided professional services including epidemiological expertise, and risk assessments and held the main stock of guns, drugs and ammunition and other equipment used initially in the outbreak. In addition, it made a major contribution to serological testing through the provision of quality management systems, IT resources and staff experienced in large scale testing and test validation to other institutes (IAH Pirbright, CAMR, AHT) engaged in this activity as

well as adapting three of its regional laboratories to undertake serological testing.

- Institute for Animal Health, Pirbright. IAH Pirbright is an Institute of the Biotechnology and Biological Sciences Research Council. It is the National Reference Laboratory for FMD and is also the EU Community Reference Laboratory and World Reference Laboratory for FMD. It is one of only 5 laboratories authorised to handle FMD virus in the EU and the only one so authorised in the UK. FMD experts at the Institute provided valuable advice on the diagnosis and control of the disease and were able to identify the strain of virus involved within a matter of days. Work undertaken at the Institute during the outbreak clarified issues on the biological characteristics of the virus relevant to its control. The Institute also refined and validated a new serological test for FMD during the outbreak which was used to test over 3 million blood samples during the outbreak.
- The Meat and Livestock Commission, a non-departmental public body funded by levy, carried out a number of ad hoc or newly-contracted tasks on behalf of Government, including escorting livestock vehicles under the welfare schemes; the setting up and supervising cleansing and disinfection facilities other than at abattoirs; and administrative support for the sheep shearing, dipping and scanning licence schemes with a helpline for inquiries on these schemes.

2.1.13 Parts of DETR, which became part of DEFRA, involved in dealing with FMD were:-

- Policy Divisions dealing with rural economic and social matters. These staff also supported the Rural Task Force.
- Policy Divisions dealing with waste strategy and policy and with air and environment quality, who were involved in matters relating to the disposal of carcasses and clean up.

2.1.14 The Environment Agency, an agency of DETR and now of DEFRA, was actively involved in assessing and regulating the environmental implications of the disposal of culled animals and clean up. It played a very important part at local and national level in protecting the environment.

The Ministry of Defence

- 2.1.15 Military support was provided as Military Aid to the Civil Authorities (MACA), and specifically within the subset of these procedures known as Military Aid to Other Government Departments (MAGD). All MACA is provided at the request of the civil authority:- in the case of MAGD another government department asks MoD to undertake tasks for which it is responsible. Legally, a Defence Council Order is required to undertake a MAGD task.
- 2.1.16 Support for all MACA tasks is provided from within existing MoD resources. The MoD has no units designated for MACA tasks, units are not trained specifically for MACA tasks, and MoD is not funded for these tasks. MoD provides support through the deployment of military capabilities available at the time and does not provide support if there is a credible civil alternative.
- 2.1.17 The Centre for Defence Analysis (CDA) in DERA (now the Defence Science and Technology Laboratory) was frequently represented on the Science Group headed by the Chief Scientific Adviser. Tasks included the provision of updated scientific and technical information on logistical issues, and ensuring that the most up to date data and epidemiological predictions were being used in forecasts.
- 2.1.18 The Met Office provided input to MAFF viral modelling from 20 February 2001, initially on a limited basis, but rapidly thereafter on a more detailed and wide-scale basis. Advice was provided to MAFF on airborne disease risk and dispersal of virus and smoke from pyres, amongst other aspects. The Met Office also provided specialist weather forecasts.

Government Offices for the Regions (GOs)

- 2.1.19 GOs performed a number of key support functions during the emergency. They:-
- a) provided significant manpower particularly for some key posts and logistical support to establish and maintain Disease Control Centres and in support of communications/media handling;
 - b) assisted as necessary in local negotiations e.g. on disposal sites; and

- c) liased on tourism and rural economy issues as required, for example, playing an active role in regional task forces set up to provide short term support to rural communities and to prepare longer term action plans for rural recovery.

Department of Health

2.1.20 The Department of Health addressed the public health implications of the FMD epidemic and provided guidance for the protection of human health in relation to the potential risk of the transfer of the disease from animals to humans and the environmental and human health implications arising from the slaughter of animals and the disposal of carcasses. They took the lead in co-ordinated monitoring of public health issues and publishing the results.

The Food Standards Agency

2.1.21 The Food Standards Agency gave advice on food safety issues and commissioned monitoring around pyre sites. It also deployed the Meat Hygiene Service. The Meat Hygiene Service provides official veterinary control of slaughterhouses in GB. MHS Official Veterinary Surgeons are responsible for the ante and post mortem inspection of all livestock slaughtered in GB for human consumption and are part of the UK's surveillance system for notifiable diseases. They also act for MAFF/DEFRA in approving and controlling slaughterhouses for the slaughter of susceptible animals for human consumption, and carried out additional FMD duties on behalf of MAFF/DEFRA including extra ante-mortem inspection and the supervision of cleansing and disinfection of vehicles at abattoirs.

Other Government Departments

2.1.22 Other Government Departments made important contributions during the crisis. These included:-

- a) Office of Science and Technology - which co-ordinated the Science Group advice;
- b) Jobcentre Plus (previously the Employment Service) which recruited for a wide range of tasks and established support for individuals whose employment was affected by the outbreak;
- c) HM Treasury;

- d) HM Customs & Excise and Inland Revenue, which gave substantial help to rural businesses hit by the crisis;
- e) Department of Trade and Industry, which sponsors the Regional Development Agencies and the Small Business Service (SBS) which operates through its network of BLOs, both of which were closely involved in the help provided for non-farming businesses via the Business Recovery Fund;
- f) Department for Culture, Media and Sport, which was responsible for liaison with the tourist industry, announced additional funding for tourism promotion, issued guidance to visitor attractions and event organisers and carried out some impact assessment work;
- g) Department of Transport, Local Government and the Regions (and, before the election, DETR) which contributed to the development of the carcass transport arrangements, advised on planning issues and supported the provision of GIS advice;
- h) The Home Office worked closely with police forces to ensure that effective national co-ordination of the police response took place, making full use of the Police National Information and Co-ordination Centre machinery which was set up for the purpose; and used its good offices to ensure that police views about the implications of the overall handling of the crisis for forces were raised with and addressed by MAFF;
- i) The Foreign and Commonwealth Office assisted with providing information abroad and dealt with trade, tourism and resourcing issues (such as foreign veterinary staff).

These and many other Government Departments also loaned staff to DEFRA to assist in establishing and running the Disease Control Centres and to support policy and legal work in London.

Local Government

2.1.23 Local authority trading standards departments are responsible for a wide range of enforcement activities in respect of animal diseases and animal welfare. The outbreak of foot and mouth disease required substantial enhancement of these activities, notably in relation to the enforcement of

new rules on animal movements and biosecurity as well as licensing movements of animals to slaughter for human consumption. From September, local authorities also took on the responsibility for issuing most animal movement licences under the new controls. These responsibilities required close liaison between DEFRA and local authorities, principally through the trading standards co-ordinating body, LACOTS; and the establishment and funding of substantial additional licensing teams in County Councils and Unitary Authorities.

- 2.1.24 Local authorities also had lead responsibility for closure and reopening of rights of way and provided help to small businesses suffering hardship, by way of rate relief, with additional support from central Government.

The Police Service

- 2.1.25 The Police Service played an important role in supporting DEFRA throughout the FMD crisis. The Association of Chief Police Officers (ACPO) acted as co-ordinators for the service's national response to the crisis and established a national level co-ordination centre at Suffolk Police Headquarters to act as a focal point for this. Senior officers representing ACPO staffed a liaison cell in the Joint Co-ordination Centre to ensure that a national police operational perspective and capacity could be made available.
- 2.1.26 Those forces serving areas directly affected by the disease put in local command structures in order to manage their resources and maintain the flow of essential information to ACPO.
- 2.1.27 Much of the police work was at the practical operational level. Officers performed a range of duties associated with FMD, including enforcing bio-security, mediating between officials and animal owners and ensuring that those who needed to enter land for the purpose of slaughter could do so safely. The epidemic also became the focus for a number of protests such as in relation to carcase disposal, with which police were required to deal.
- 2.1.28 The epidemic also raised a number of cross-cutting issues; not least of which was the need to ensure that the firearms licensing system responded in a way that allowed the slaughter teams to perform their task effectively and within the law.

The Devolved Administrations

- 2.1.29 Both the Scottish Executive and the National Assembly for Wales played an important role in the eradication of FMD. Each administration has made its own contribution to the Lessons Learned Inquiry with the Inquiry team taking evidence from the public, stakeholders, Ministers and officials in Scotland and Wales. The functions carried out by both administrations are outlined below.

The Scottish Executive

- 2.1.30 Animal health is devolved to the Scottish Parliament and the Scottish Ministers are responsible for policy development and implementation. The details of the Scottish response to FMD are therefore provided in the Scottish Executive's separate response to the Lessons Learned Inquiry. Great Britain is however in most respects a single epidemiological unit; and the same EU and international requirements apply to all parts of the country. Veterinary services after devolution have therefore continued to be provided by a single GB State Veterinary Service; and the broad approach to FMD control policy was common throughout GB.
- 2.1.31 The relationships between the Scottish Executive and both DEFRA and the SVS are defined in concordats. These arrangements generally worked well. Where there was divergence in control policy and, more noticeably, implementation, this reflected the different circumstances of the disease in Scotland and the different roles of some of the agencies concerned. In broad terms there was a successful co-ordination of disease control and eradication work north and south of the border. Co-ordination was achieved through close liaison between the ACVO (Scotland) and senior SVS management in Page Street; Scottish Executive membership of COBR; frequent discussions between senior policy staff and involvement by the senior Scottish Executive agriculture official in London meetings; and the deployment of a Scottish Executive liaison officer to Page Street for most of the outbreak.
- 2.1.32 In addition to the disease control work there was some co-ordination on the economic relief and recovery work. The Scottish Executive was represented on the Rural Task Force. Whilst the actions emerging from the Rural Task Force were largely English based, significant support was provided to Scottish businesses by sympathetic assistance by the Inland Revenue and Customs and Excise. The Employment Service was also helpful in offering assistance to those made unemployed as a consequence of FMD and also in terms of providing some staff resources to assist the Scottish response to the outbreak.

2.1.33 The co-operation of the Scottish Executive and the UK Government continued once the disease had been eradicated in Scotland, particularly over the issue of re-entry into export markets. International and EU negotiations are reserved (by the Scotland Act) to the UK Government. There was close co-operation in pursuing the case for resumption of Scottish sheepmeat exports to European markets within the context of the efforts to achieve a progressive re-opening of markets for the whole of the UK in line with EU and OIE criteria.

The National Assembly for Wales

2.1.34 The National Assembly for Wales was responsible for the political handling of the epidemic in Wales. Assembly Ministers presented DEFRA's policies on disease control to farmers and the people of Wales. The Assembly does not have the principal powers for dealing with Foot and Mouth Disease (FMD) under the Animal Health Act. This meant that, during the FMD crisis of 2001 its role was limited to:-

- contributing to Government policy on disease control to attempt to bring in the Welsh dimension via regular contact between officials and agriculture Ministers and by posting a senior Assembly official at DEFRA's headquarters in London to ensure better communications between Whitehall and Cardiff;
- being jointly responsible for amending some legislation on issues such as closure of footpaths and animal by-products and separately responsible for subordinate legislation under the European Communities Act 1972;
- providing field and administrative support staff to help the SVS in Wales at culling and disposal sites; and
- providing administrative staff to undertake licensing work at Wales' Divisional Offices on DEFRA's behalf.

2.1.35 From 26 March onwards, the Assembly was asked by DEFRA to provide, via a section 41 arrangement (under the Government of Wales Act), the Regional Operations Directorate to manage all operational aspects of the disease control response in Wales.

2.1.36 The general relationship between the Assembly and DEFRA is defined in a number of concordats which, together with the Section 41 arrangement outlined above, set out the framework between the two organisations. But in practical terms, the relationship was built around

regular contact and agreement between officials and Ministers. The head of the SVS in Wales was in daily touch with senior SVS staff in London; the Assembly was represented at the JCC and COBR meetings and a liaison officer was situated full time in Page Street for the duration of the crisis.

SECTION 2

CONTINGENCY PLANS

Background

- 2.2.1 This section describes the contingency plans which were in place and implemented effectively at the outbreak of the epidemic. As a member of the EU, the UK complies with the EU agreed provisions governing the control of FMD. These include the preparation of a foot and mouth disease contingency plan, as required by Article 5 of Directive 90/423. This Directive lays down a framework for Member States when drawing up their individual contingency plans. The contingency plan for Great Britain was sent to the Commission in 1992 and endorsed by them. It is updated regularly, most recently in July 2000. The plan was not, at the time of the outbreak, available on the website:- it was placed on the DEFRA website in August 2001. The plan includes detailed veterinary instructions and guidance that are set out in Chapter 3 of the SVS's Veterinary Instructions, Procedures and Emergency Routines (VIPER). These instructions are not available on the DEFRA website, but are on-line internally.
- 2.2.2 As with all other plans produced by Member States under this Directive the contingency plan was based on the expectation of an outbreak occurring on a similar scale to those previously experienced in Europe; but this outbreak was on a much greater scale. Other Member States and other countries, including Australia are now considering how they should upgrade their plans to deal with the size of outbreak Great Britain experienced.

Coverage

- 2.2.3 The plan sets out the legislative framework for action against foot and mouth disease, financial provisions, national and local disease control centres, personnel resources, availability of diagnostic laboratories, epidemiologists and training exercises. It explains how awareness of the disease should be maintained among veterinary surgeons and farmers at all times.
- 2.2.4 It places responsibility for the control of FMD in England and Wales with the Secretary of State for Environment, Food and Rural Affairs who is then able to delegate the direction of control strategies. National and local Control Centres are identified and their responsibilities explained; the facilities and stores necessary to deal with an outbreak are indicated and a list of proformas and public notices provided. The local centres

are expected to liaise with local groups with expertise in epidemiology, able to advise on cleansing and disinfection as well as carcase disposal.

- 2.2.5 The plan provides the framework for maintaining a state of readiness against a case of foot and mouth and for mounting a response to an outbreak. The structures and systems set up during the outbreak accord with the provisions of this plan.

VIPER - SVS Field Service Manual

- 2.2.6 VIPER provides guidance and procedures for dealing with diseases and all the other tasks that the Veterinary Field Service performs. The introduction explains that the Chapters consist of instructions and guidance. The instructions relate both to legislative, financial and administrative matters and to veterinary and scientific matters. The guidance is drawn from experience and has been compiled to produce what is agreed to be the best practice at the time. The Chapters are augmented in times of need by Action Notes, related to a specified finite task, and Emergency Instructions, which require immediate action.
- 2.2.7 VIPER is made up of over 100 chapters, of which about 50% are available on the DEFRA intranet for vets and other members of staff. Other chapters are available as hard copy. The chapters cover procedures for anthrax, foot and mouth disease, tuberculosis, bovine spongiform encephalopathy and many less well known animal diseases; animal welfare; import and export of animals and animal products; procedures for dealing with markets, sales and lairages and general procedural requirements such as work recording.
- 2.2.8 Chapter 3 on foot and mouth disease is comprehensive. It is based on the EU agreed slaughter policy and disposal arrangements. The major part of the chapter was updated in August 2000, although changes were made during the course of the epidemic by Emergency Instructions. The Chapter covers in considerable detail all the information and guidance that it was considered would be needed in the course of an outbreak of previously experienced size; the legislative framework, the responsibilities of the headquarters, regions and divisional veterinary managers, reporting and confirming disease, moving diseased material for testing, dealing with the disease in slaughterhouses and in markets, valuation, labour and plant, including health and safety aspects, slaughter and disposal, cleansing and disinfection, epidemiology, restocking and withdrawal of restrictions. These sections set out in some detail the tasks that have to be undertaken and the way in which they should be pursued.

- 2.2.9 Chapter 3A deals with ring vaccination. At the outset of the 2001 outbreak, the on-line VIPER 3A contained background information on the legislative position regarding vaccination. This was updated in October 2001. More detailed instructions had been prepared in 1998 and held in reserve. VIPER 3A is currently being re-written and substantially expanded. The revised chapter will be placed on the DEFRA intranet when completed.
- 2.2.10 With VIPER Chapter 3 as a basis for managing the outbreak, Emergency Instructions (EIs) were issued to reflect changes as policy developed and experience was gained in combating the disease in the field. The scale of the outbreak and the need to address different aspects of animal husbandry during the year in relation to the state of the epidemic at that time meant that during the course of the outbreak over 200 EIs were issued. These covered issues such as animal welfare, sheep shearing and dipping, licensing of animal movements and provision of cleansing and disinfection facilities, as well as action in relation to policy developments.

Local Contingency Plans

- 2.2.11 Each of the 23 Animal Health Divisional Office is required to have contingency plans for FMD and other diseases. These were all checked and updated in 2000. They focus on ensuring that all the local information that might be needed in the event of an outbreak is readily available and that AHDO staff know how to implement the veterinary instructions. The plans are discussed with the appropriate parts of the local authority such as those responsible for enforcing the movement restrictions. They include the necessary forms, administrative information and local names and contact numbers for local authority animal health inspectors, local authority Chief Executives, coal and timber merchants, markets, milk depots and creameries, local large animal veterinary practices, road hauliers, hunts, and staff's home numbers. These plans, together with Chapter 3 from VIPER, covering the veterinary/scientific guidance and advice provide the information necessary to deal immediately with an outbreak of foot and mouth disease and engage local stakeholders and resources. Local exercises are undertaken to ensure that the information is up to date and can be put into use.

Simulation Exercises

- 2.2.12 Simulation exercises are required under the contingency plan and are used to test, develop and improve plans and enable staff to become familiar with the tasks required in an emergency. Practice in dealing

with outbreaks of disease is undertaken at a number of levels. Local small scale desk exercises focussed on particular aspects of handling disease outbreaks, such as tracing the movement and location of animals from market records, are as necessary to effective management of an emergency as the larger scale exercises which involve headquarters, as well as local authorities. The last major exercise, organised by the DVM Inverness in Thurso in 1998 involved the local authority, police, Scottish Environmental Protection Agency, the Water Board and the milk purchaser and was, like all others, fully reported, lessons identified and recommendations made on improvements in the procedures.

- 2.2.13 The Classical Swine Fever outbreak in 2000 provided valuable experience for many in the SVS for managing a locally based epidemic. This experience fed into the way the FMD epidemic was managed, although the gap of only six weeks between the two epidemics meant that there was no time to implement lessons learned and many SVS staff were still recovering physically from work on CSF when FMD struck. During the FMD epidemic all the DCCs developed their structures, organisation and management to reflect their experience. Desk instructions were further developed for the hundreds of newly appointed staff; and formal process mapping undertaken to assist in the management of the complex organisation necessary to deal both with the compensation claims and administration arrangements and the physical requirements of offices where cleansing and disinfection for staff returning from the field was of paramount importance. DCCs are all ensuring that their experience is recorded to contribute to preparations for future disease outbreaks.

SECTION 3

THE GOVERNMENT'S RESPONSE

Introduction

- 2.3.1 This section deals with the organisation and structures of the Government's response. It explains how it was managed and developed over time and across the country. It covers the initial structure in MAFF and the organisation that was established at the start of the outbreak. It then sets out the enhanced structure developed from the middle of March, particularly the separation of policy and operations in the field and the deployment of the armed forces; the overall co-ordination and direction managed through COBR, the establishment of the JCC and the cross-departmental working and liaison with stakeholders both nationally and locally. The development of disease control policy, as opposed to operational conduct of that policy, is discussed in Section 7.

Organisation - Initial Structure in MAFF

- 2.3.2 At the start of the epidemic and in line with the EU contingency plan and with practice during the outbreak of Classical Swine Fever in 2000, responsibility for control of the outbreak lay, in MAFF, with the State Veterinary Service (SVS), headed by the CVO. Within the SVS responsibility for controlling the disease in the field - identifying, reporting and confirming the disease, epidemiological enquiries, tracing movements of animals, people and vehicles, slaughter and disposal, valuations, cleansing and disinfection all lay with Divisional Veterinary Managers (DVMs) and their staff at the Animal Health Divisional Offices. At the start of the outbreak there were 23 AHDOs headed by DVMs who are responsible in their division for implementing animal health and veterinary policy. They reported to the five Heads of Veterinary Services (HVSs):- Scotland, Wales (in the person of the ACVO Wales) and England, North, West and South. The HVS in Scotland reports to the ACVO Scotland while the other HVSs report to the DCVO (Services).
- 2.3.3 Policy advice on the management of the disease lay with the CVO, supported by policy administrators in Animal Health Group and veterinary advisers in the HQ Veterinary Policy Group headed by the DCVO Policy. He was also responsible for relations with the European Commission, the Standing Veterinary Committee, and international interests.

2.3.4 Policy and operational responsibilities in the Animal Health and Environment Directorate were united, reporting to Ministers and the Permanent Secretary as in the organogram at Figure 2 (see paragraph 2.1.5) showing the lines of responsibilities in February. As indicated in the chronology, a Departmental Emergency Control Centre (DECC) was set up immediately at Head Office, and Disease Control Centres (DCCs) were established, usually within Animal Health Divisional Offices, wherever there was an outbreak. The CVO held daily co-ordination meetings in Page Street; Ministers were briefed daily, if not hourly; the CVO and the Minister gave daily press briefings; Ministers reported weekly to Parliament in statements, questions and debates.

Departmental Emergency Control Centre (DECC)

2.3.5 The DECC, which is the National Disease Control Centre required in the EU Contingency Plan, was set up on 21 February and staffed by vets and a team of administrators. Its function was to receive reports of disease from vets in the field and to confirm disease on behalf of the CVO, either on the basis of a clinical report alone or a receipt of positive laboratory results. It was responsible for collecting and co-ordinating initial case data, authorising the slaughter of dangerous contact animals and in conjunction with the Epidemiological Unit, advising on the setting up of infected areas. It was responsible for interpretation of FMD laboratory results. Its initial databases formed what was to become the Disease Control System (DCS) databases. The DECC Serology Unit was responsible for audit of the serological surveillance, interpretation of laboratory results and giving veterinary clearance to lift infected areas.

Geographical Information System (GIS) Unit

2.3.6 A GIS Unit was set up immediately as part of the DECC, building on the capability developed during the Swine Fever outbreak. GIS systems were also put into DCCs. The GIS systems were linked to a number of departmental databases and the Units were able to produce high quality maps showing the location of infected premises, the limits of infected areas and maps of the disease, progress of serology and other disease control activities.

Epidemiology Unit

2.3.7 A central Epidemiology Unit was also established as part of the DECC. It included one departmental field epidemiologist with international experience of dealing with FMD control, the head of the Epidemiology Department at VLA, as well as two departmental vets with postgraduate qualifications in epidemiology and seconded international veterinary

epidemiologists. In the field it was supported by a mobile team of veterinary epidemiologists who collected the fundamental case data for analysis by the central unit to determine the characteristics of the epidemic and to advise on control strategy as well as investigating the methods of spread which fed into the national biosecurity campaign. The Unit used the Interspread model to model the epidemic and predict the likely spread of disease and size of the epidemic in different control strategy scenarios.

Risk Assessment Unit

- 2.3.8 At the beginning of March the CVO established a Risk Assessment Unit. Its task was to consider the risks posed by particular activities; to identify ways in which those risks could be managed; and to make recommendations which could be used by policy makers when deciding on action as the epidemic progressed. In formulating the risk assessments, expert advice and opinion was obtained from VLA's Risk Research Unit and Pirbright and risk management options were discussed with industry stakeholders. The risk assessments were published on the DEFRA website.

State Veterinary Service (SVS)

- 2.3.9 As the epidemic developed during March, full time members of the SVS were augmented by the employment of private vets and vets from overseas as Temporary Veterinary Inspectors (TVIs). The pre-existing total complement of the SVS of about 300 vets and 117 TVIs was increased during March to over 1,200 including vets from overseas. Later in the epidemic the numbers of vets increased still further to over 2000. Advice to DVMs on recruitment of additional TVIs was circulated on 23 February. An advertisement in the Veterinary Record and letters from DVMs to local practices resulted in many applications from veterinarians to become TVIs. By the middle of March over 500 applications had been received and were being processed.
- 2.3.10 Assistance was provided by over 550 foreign Government vets on secondment from 22 countries. An international agreement exists between the UK and Australia, New Zealand, Republic of Ireland and Canada whereby veterinary surgeons assist the other member countries in the case of serious notifiable disease. A revised draft agreement includes the USA and extends the assistance to other key personnel. These countries provided tremendous assistance. Veterinary staff from many EU and non-EU countries also provided assistance. The experience these state vets brought was invaluable and meant they could play key roles with minimal training. The first overseas vets, from the

Republic of Ireland, arrived on 2 March and the first from the USA arrived on 6 March. The foreign government vets stayed 3-4 weeks on average and, in the case of the international agreement countries, were replaced after this time. This enabled “clean” vets to be provided at regular intervals.

- 2.3.11 Although the number of vets could be increased by employing TVIs the relatively small number of administrative and technical staff in the SVS was not adequate to cope with the tasks that the growing epidemic was imposing.

Enhanced Structure - from 14 March

- 2.3.12 It became clear in the middle of March that the size of the outbreak was placing impossibly heavy demands on the resources, management and organisational capacity of the SVS. In particular, scarce state veterinary resources at head office and in the field were being diverted by management tasks which did not require professional veterinary judgements, such as the disposal of carcasses, the handling of local interest groups and media, and the improvement of management information. Essential veterinary management tasks – the handling of incoming veterinary volunteers, the prompt diagnosis of reported cases, following up tracings, the interpretation of epidemiological information – were at risk of suffering.

- 2.3.13 The need to have a greater range of disposal options also became important as the number of carcasses requiring disposal increased (see 2.7.33-2.7.49). Centrally organised large scale solutions to disposal issues, through such means as contracts with rendering plants and large scale burial sites were necessary.

Separation of Policy and Operations

- 2.3.14 It was therefore decided, so far as practicable, to separate veterinary policy and operational functions, both at head office and in the field. This reflected the broad distinction at the top Ministerial level between the role of COBR overseeing operational strategy and logistics and that of the PM, MAFF Ministers and other departmental Ministers in charge of policy. Such separation would make the best use of scarce veterinary resources, and increase the effort which could be applied to critical operational issues downstream from the epidemiological, disease control and diagnostic judgements which had to be made by vets. To this end, a Director of FMD Operations was brought into head office on 14 March, alongside the CVO and Head of Animal Health, reporting to the Head of Animal Health and Environment Group. This post developed on 26

March into the Director of the JCC. The resulting structure is shown in the organogram at Figure 3, following paragraph 2.1.6.

- 2.3.15 In the field, Regional Operations Directors (RODs) were similarly introduced, alongside the Divisional Veterinary Managers. RODs - members of the Senior Civil Service - were charged with organising the administrative input, managing activities such as slaughter and disposal, valuations, cleansing and disinfection, building up links with Government Offices and local authorities, explaining Government policy to local communities and farmers and listening to their concerns and dealing with the media. The first RODs were appointed on 19 March to Cumbria and Devon. Others were subsequently appointed in Scotland (20 March) (where responsibilities were defined rather differently); Chelmsford, Wales, Gloucester and Leicester on 26 March; Worcester, Newcastle and Stafford on 27 March and Leeds on 28 March. Later appointments were made in Preston and Taunton.
- 2.3.16 The RODs and DVMs had complementary responsibilities and worked in parallel to manage and lead integrated offices. The build up and management of the DCC structure and organisation was not prescribed by headquarters, but delegated to those on the ground so that the most effective operation could be developed, taking into account the resources, in terms of the availability and skills of the staff, the accommodation and the demands imposed locally by the size of the outbreak. The DCCs were nearly all based at existing Animal Health Offices, although the size of the offices rapidly exceeded the available office space in all locations. Derelict offices in Leeds were upgraded and pressed into service; the Carlisle office spread into 53 portacabins and elsewhere space was borrowed from other departments. The Carlisle AHDO had been the office responsible for Northumberland so the decision to establish an office at Newcastle to increase the efficiency of the operation there, led to an office of 200 people being brought together into full operation in two weeks. It later grew to over 500.
- 2.3.17 Staff at all levels, including some RODs, were loaned to DEFRA from many other departments following the central commitment to a Government wide approach, although difficulties in finding sufficient middle managers and staff with financial expertise remained throughout the outbreak. Staff were also loaned from local government and more were recruited through the Employment Service and local commercial agencies. When the epidemic was at its height, over 7,000 staff across the DCCs and Animal Health Offices, excluding TVIs, the armed forces and contractors, were wholly engaged on FMD. In Newcastle, because it was a new office, never more than 10 were originally DEFRA staff, but all worked together to ensure an effective team. The Government

Offices played a significant role by their contribution to setting up, managing, staffing and supporting the DCCs.

The Armed Forces

2.3.18 The initial contact between MAFF and MoD occurred at Ministerial level on 20 February, warning of the possible requirement for military support. Although there was much media and public interest in military involvement, the early stages of the epidemic presented no obvious opportunities for military participation. Initial efforts therefore focussed on the identification and utilisation of specialist military resources which might be of use, taking into account their specialist skills. In this context, requests in early March for the possible deployment of snipers to assist in culling large pig farms was agreed in principle, but they were not in fact required. The MoD, in response to a request for veterinary support, deployed 4 vets (all that were available) from the Royal Army Veterinary Corps on 14 March. In parallel a number of informal contacts were made at local and regional level between MAFF offices and the MoD command structure (informal contacts between the Scottish Executive and Army Headquarters took place separately in Scotland from 5 March).

2.3.19 A more significant deployment of the armed forces was however agreed in principle at a meeting of MAFF and MoD officials on 14 March. This identified a crucial gap the armed forces could fill. Throughout the epidemic both the volume of specialist civil resources and the requirement for resources vastly exceeded the volume of available military resources, but it was important that civil resources were mobilised effectively for key tasks. By 14 March it was apparent that the logistic and organisational capability of the armed forces would be of value if applied to the mobilisation task, bringing civil resources into play. As a result of the 14 March discussion, two officers from MOD's logistics organisation visited MAFF HQ in London to define in greater detail the contribution the armed forces might make. Troops were deployed initially to Devon and Cumbria, from 19 March, and a headquarters element of 101 Brigade (approximately 25 personnel) was deployed to MAFF Headquarters on 23 March to assist with logistic co-ordination and planning.

2.3.20 The Defence Council Order of 20 March approved the deployment of the armed forces "to supervise destruction of the carcasses of animals slaughtered as a result of the current outbreak of FMD, on behalf of MAFF, in Cumbria, Devon and adjacent districts". This remit was subsequently widened to include the possibility of direct armed forces' involvement in most stages of the eradication process. A Defence

Council Order of 28 March approved armed forces' assistance to MAFF “to support their efforts to eradicate FMD in the UK, undertaking those tasks to which they are suited, where the need is urgent”.

2.3.21 By 1 April, 1,000 personnel from all three services were deployed, rising to 2,100 by 15 April. Thereafter the military contribution gradually reduced until by 3 June 550 troops were deployed, by 17 July 120 troops and by August less than 30 were deployed - in Wales. Additional troops were brought back to Northumberland in late August and early September in response to further outbreaks. The 101 Logistic Brigade detachment withdrew all but two of their staff from DEFRA between 18 and 20 June. The remainder withdrew on 6 July. However the armed forces remained on 24 hour availability until the Government declared the emergency over.

Integrated Management and Control

2.3.22 Obviously the MoD was the only department or agency involved with a military command structure. This provided the armed forces support and ran from MOD, through Land Command to divisions and brigades in local areas and regions. Within each DCC the armed forces, the administrative teams headed by the RODs and the veterinary teams headed by the DVMs worked together to tackle the problems with mixed units contributing to animal gathering and slaughter management, disposal and cleansing and disinfection. All the separate elements were co-ordinated by the JCC where 101 Logistic Brigade worked closely with MAFF and other staff in the same office, and this, together with the co-operation and integration at DCC level, made the organisation work effectively.

Overall Co-ordination and Direction

2.3.23 The Prime Minister was closely involved from the outset, with almost daily meetings with the Minister of Agriculture and the CVO and meetings of Ministers on disease control strategy. As the national scale of the outbreak became clear, the Prime Minister with the Cabinet and the Minister of Agriculture oversaw the development of policy. On 20 March he initiated daily interdepartmental meetings chaired by MAFF Ministers to drive forward the control operations. Once it had become clear the outbreak was of a national scale and of crisis proportions, the Cabinet Office Briefing Room (COBR) was opened.

2.3.24 Meetings in COBR were held between 24 March and 7 May on a daily basis (twice a day initially and at weekends over the first few months). Meetings were chaired initially usually by the Prime Minister or Secretary of State for Defence and later by MAFF/DEFRA Ministers and

attended by Ministers and senior officials from all the relevant departments and agencies. COBR meetings took decisions on operational matters and considered the daily JCC Reports, but did not address policy issues which remained a matter for departmental Ministers and the Cabinet. The Secretariat of COBR, provided by the Cabinet Office, produced notes setting out decisions and actions required. The Secretariat also monitored progress against these notes and set the agenda for each meeting accordingly, in consultation with the JCC.

Departments and others represented at COBR
Number 10 The Cabinet Office Ministry of Defence H M Treasury Ministry of Agriculture, Fisheries and Food (later DEFRA) Department for Environment, Transport and the Regions (later DEFRA) Department for Culture, Media and Sport Department for Education and Employment (later Department for Work and Pensions) Department for Transport, Local Government and the Regions Department of Health Home Office Department of Trade and Industry Office of Science and Technology Foreign and Commonwealth Office Regional Co-ordination Unit Inland Revenue Environment Agency Food Standards Agency Scottish Executive National Assembly for Wales

2.3.25 COBR's primary function was to oversee, monitor and direct the operational efforts to eradicate FMD. It kept a check on the progress of the epidemic; the availability and deployment of resources to tackle it; the establishment of targets, for example on culling policy, to ensure that policies were fully implemented; the options and use of disposal outlets particularly in relation to the impact these had on the environment and public health; and on public perception of the disease and the opening up of the countryside. COBR commissioned key management information from MAFF/JCC which then provided the information needed about the epidemic and its eradication to inform operational decisions. It provided the forum at which the Chief Scientific Adviser gave his advice based on discussions in the Science Group on a number of scientific issues,

including epidemiological modelling, which was a major factor in deciding the operational targets designed to bring the epidemic under control.

- 2.3.26 Another important function of the COBR meetings was to ensure that across the various Whitehall Departments the Government's response to FMD was properly co-ordinated. All departments with a role to play were invited to attend, as were senior officials from key agencies such as the Environment Agency, the CVO and the Government's Chief Scientific Adviser, and representatives from the Scottish Executive and National Assembly for Wales. Other players such as the FSA were brought in as issues evolved. When necessary information to and from external sources such as local authorities and the police was channelled through COBR by the relevant sponsor Departments. The Foreign and Commonwealth Office also attended on a regular basis to ensure the international situation was taken into consideration.
- 2.3.27 At the end of the first week in March, the Government News Co-ordination Centre began to co-ordinate press briefing across Government departments on all aspects of the epidemic and its impact and issue daily press briefs
- 2.3.28 As the peak of the epidemic passed, COBR meetings were reduced to twice weekly through to after September 11, when, in view of other priorities, responsibility for managing meetings passed from Cabinet Office to DEFRA. These FMD Co-ordinating meetings continued to run at least fortnightly, chaired by DEFRA Ministers or the DEFRA Permanent Secretary until February. From early August onwards these meetings - as well as monitoring the disease and follow up and the wider international implications - concentrated on the phased return to something like a new normality through the introduction of the Autumn Movements Regime introduced in September, and subsequently the Interim Movements Regime introduced in February.

The Joint Co-ordination Centre

- 2.3.29 The Joint Co-ordination Centre was established on 26 March to co-ordinate the disease control operation across the country and to co-ordinate the departmental input into operational policy from departments across Whitehall. The JCC was headed by the Director of FMD Operations who became the Director of the JCC reporting to the Head of Animal Health and Environment Directorate. He was assisted by two Deputy Directors - the Commander of 101 Logistic Brigade and a MAFF official.

- 2.3.30 The function of the JCC was to provide and maintain an accurate ground picture of progress of the campaign, provide a liaison network to facilitate the rapid dissemination of instructions and information to the field and present information on the operation to all interested parties. It reported to COBR and to MAFF (later DEFRA) Ministers. It provided centralised input to issues where this was necessary such as the development of disposal policy options, and overall supervision of the disposal operation, development of a traffic handling facility and the centralised purchasing of resources. The JCC was in constant contact with the DCCs, received daily reports from them and reported formally to them in response. It produced a daily report to COBR on the state of the epidemic, the resources deployed, the effectiveness of the operation, (the culling and disposal targets) disposal options, costs and on measures being taken to return the countryside to normality.
- 2.3.31 The JCC was run as the operations headquarters. Cells, physically co-located in the same open plan office, were created and staffed to deal with the various operational functions e.g. current operations, disposal, duty lawyer, veterinary liaison, press briefing and liaison, cleansing and disinfection, procurement and contracts and, distinctively, several cells staffed by other departments and representing those departments to ensure effective co-ordination. These departments and organisations included the Regional Co-ordination Unit (RCU), the Employment Service, DETR-Environment including waste policy and management (which later became part of DEFRA), DETR-Transport, Department of Health, Environment Agency, MOD, DERA, ACPO, and NFU. The NFU provided valuable information on the impact of policies on the ground directly to those responsible for developing operational plans.
- 2.3.32 Wider co-ordination was achieved by the immediate introduction of thrice daily "Birdtables" which spread the co-ordination net across policy as well as operations and to which other departments continued to contribute long after the decline in the epidemic meant that they no longer maintained a cell in the JCC. The JCC therefore provided co-ordination within MAFF/DEFRA, across Whitehall and between COBR and the organisation on the ground. Armed forces personnel and civil servants worked side by side in joint teams and the whole worked effectively and successfully.
- 2.3.33 The JCC continues to function. The tasks have altered as the epidemic has changed with a value recovery team being established and other teams being wound down. The Reports continued on a daily basis until Christmas 2001 when they became twice weekly and, since February weekly, but still go across Whitehall and to Ministers and senior officials. At the same time the JCC receives daily reports from all the

DCCs and deals with their queries and concerns. It has remained the functional centre of FMD operations.

Relations with Stakeholders

2.3.34 The Government's response to the crisis has lain not only in the development of its operational strength, but also in its relations with stakeholders. The NFU was integrated into the JCC at national level and in some of the DCCs. In MAFF, from early in the outbreak, Ministers, the CVO and officials with animal health policy responsibilities have had weekly meetings with representatives of the main stakeholders including the farmers' unions, representatives of other affected industries, animal breeders' associations, valuers, auctioneers and local authority organisations. These have enabled updates on the disease to be provided and questions answered, discussion of the way policy is developing and information on the implementation on the eradication policies to be provided and discussed. They are a valuable means of exchanging views and information and have ensured both that those most affected have been kept informed and that policy has been developed with an understanding of their problems. These have been replicated across the country on a local and regional basis by RODs and DVMs supported by GOs.

2.3.35 Separately, the Rural Task Force, chaired before the election by the Minister for the Environment in DETR and supported by DETR officials (DEFRA after the election), brought together representatives of the Government Departments and agencies (including the devolved administrations) and stakeholders with an interest in the broader rural economy and communities, including representatives of small businesses, tourism, the National Trust, Women's Institutes and churches. The Task Force was closely involved in monitoring the impact on the rural economy, developing the successive packages of assistance to rural small businesses, and developing measures and guidance to enable access to the countryside to be restored as soon as practicable.

Local Communities

2.3.36 In the early days of the outbreak the focus of communications from the Animal Health Offices was on keeping individual farmers and those directly affected by the outbreak aware of what was happening. Pressure on resources meant that less effort went to providing information more generally to the local community. The Government is aware of criticisms that have been made by local authorities, public health authorities and community groups that their information was less than

adequate for a full understanding of the disease and its likely impact. The increasing need became apparent in March and one of the main tasks of the RODs was to improve the linkages with local authorities and regional and local Directors of Public Health and to ensure that local communities were kept informed. This they did. RODs attended meetings and briefed media to inform local people and explain policies, to listen to concerns, for example, over the development of mass burial sites and to engage local people in the battle against disease. Local information handling was aided very substantially by the appointment of Information Officers from the Central Office of Information (COI) to work within the DCCs. Information at national and county level has also been provided on the MAFF/DEFRA website set up on 20 February.

- 2.3.37 Liaison with other organisations has developed as the epidemic has developed. Many DCCs have effective relationships with local authorities, particularly in relation to the enforcement of movement restrictions, to the licensing of animal movements and in enforcing restricted infected areas where integrated working was particularly necessary. The Autumn movement controls and the licensing of a wide range of movements relied on the effective co-ordination of local authorities and DCCs and despite initial computer system problems the working relationships have been effective. Ongoing liaison on the interim controls is now in place.

ANNEX

ORGANISATIONS WHICH ATTENDED STAKEHOLDERS MEETINGS IN LONDON

NATIONAL PIG ASSOCIATION	GUILD OF WELSH LAMB AND BEEF
NATIONAL SHEEP ASSOCIATION	PRODUCERS
NATIONAL BEEF ASSOCIATION	NATIONAL TRUST
BRITISH PIG ASSOCIATION	FARM RETAIL ASSOCIATION
NATIONAL FARMERS UNION	ENGLISH NATURE
FARMERS UNION OF WALES	BRITISH GOAT SOCIETY
NATIONAL FARMERS UNION OF	ROYAL INSTITUTE OF CHARTERED
SCOTLAND	SURVEYORS
MEAT AND LIVESTOCK COMMISSION	BRITISH DEER FARMERS ASSOCIATION
BRITISH MEAT MANUFACTURERS	SOUTHERN COUNTIES FRESH FOODS
ASSOCIATION	LTD
BRITISH MEAT FEDERATION	MARKS AND SPENCER
BRITISH RETAIL CONSORTIUM	SAFEWAY
BRITISH CATTLE VETERINARY	SOMERFIELD
ASSOCIATION	WAITROSE
BRITISH VETERINARY ASSOCIATION	ASDA
ROYAL COLLEGE OF VETERINARY	CHILLED FOOD FEDERATION
SURGEONS	NESTLE
SHEEP VETERINARY SOCIETY	FARMERS FIRST
PIG VETERINARY SOCIETY	DAIRY CREST
DAIRY INDUSTRY FEDERATION	PROVISION TRADE FEDERATION
LIVESTOCK AUCTIONEERS	PET FOOD MANUFACTURERS
ASSOCIATION	ASSOCIATION
CENTRAL ASSOCIATION OF	INTERNATIONAL MEAT TRADE
AGRICULTURAL VALUERS	ASSOCIATION
LACOTS	GUILD OF QUALITY BUTCHERS
RARE BREEDS SURVIVAL TRUST	LAW LABS (ALDI)
FOOD AND DRINK FEDERATION	MCDONALDS
COUNTRY LAND AND BUSINESS	ROAD HAULAGE ASSOCIATION
ASSOCIATION	BRITISH BANKERS ASSOCIATION
ASSOCIATION OF INDEPENDENT MEAT	HSBC
SUPPLIERS	H J HEINZ
TENANT FARMERS ASSOCIATION	
JERSEY CATTLE SOCIETY	
ANIMAL HEALTH DISTRIBUTORS	
ASSOCIATION	
BRITISH LLAMAS AND ALPACAS	
ASSOCIATION	
TESCO	
SAINSBURYS	
ADDINGTON TRUST	
RSPCA	
UNITED KINGDOM AGRICULTURAL	
SUPPLY TRADE ASSOCIATION	
SMALL ABATTOIRS FEDERATION	
LICENSED ANIMAL SLAUGHTERERS	
AND SALVAGE ASSOCIATION	
NATIONAL FEDERATION OF MEAT AND	
FOOD TRADES	
ASSOCIATION OF BRITISH ABATTOIR	
OPERATORS	
SOIL ASSOCIATION	

SECTION 4

THE POSITION OF THE FARMING INDUSTRY

2.4.1 The British livestock industry has responded to market signals to produce meat and other livestock products more efficiently and at lower cost. This has led to larger holdings and higher stocking densities in some areas. The high rainfall climate of the British Isles is more suited to producing sheep cost effectively than the rest of the EU. Encouraged by the Sheep Meat Regime of the CAP, the industry has increased stocking levels over the past 30 years to unprecedented levels to become the principal supplier of extensively reared lamb to the EU. Part of the reason for the disease being able to spread so rapidly and being so resilient lies in recent developments of the livestock sector, its organisation and trading patterns and in particular the way animals and milk are transported.

Cattle

2.4.2 The cattle population of the UK has declined by around 30% over the last 30 years from 14.5 million to 11 million (now 9.5 million in Great Britain). Most of this decline is in the dairy herd as milk yields per cow have improved, with the beef herd remaining fairly constant. Beef production cycles have been significantly cut in some systems as producers have become more efficient, although the traditional production of finished cattle which can take up to 3 years from calving to final sale is still widely practised. Overall, the seasonality of production is much less marked and finishing times can vary from 11-14 months for young bulls from the dairy herd to 18-30 months for specialist beef from the suckler herd.

2.4.3 In the dairy industry the use of bulk tankers for all milk collection with tankers entering farmyards to collect the milk is a major change from the position 30 years ago when churns were collected at the roadside by a milk lorry; this change has brought with it greater problems for biosecurity. All cattle are individually identified and the requirement to notify the British Cattle Movement Service (BCMS) of all significant movements, which was developed in the aftermath of BSE, has allowed relatively easy traceability of animals.

Sheep

2.4.4 The sheep population of the UK has grown dramatically from 13.6 million breeding ewes in 1973 to 21 million breeding ewes just before FMD. The total sheep flock was some 43 million at the peak of the

summer season of which there were about 21 million breeding ewes. This is based on the UK's EU premium quota for breeding sheep which stands at 19.5 million. Spain, the next largest producer in the EU has 18.5 million breeding ewes with a quota of 19.6 million but the majority of their lamb is reared intensively to light weights on cereals.

- 2.4.5 The sheep sector is now the most mobile part of the modern livestock industry. Sheep production is largely extensive, but highly structured within the stratified breeding system unique to the UK. Because (unlike other livestock) sheep are seasonal breeders, lambing traditionally takes place in the spring from January in the SW lowlands of England through to late May in the more inhospitable hills of Cumbria, North Wales and the Scottish Highlands. This means there is a steadily increasing supply of finished lamb onto the market from April through to the start of the following season – again starting in the south and moving north. The supply peaks in the late summer and autumn.
- 2.4.6 Because the supply of UK lambs and lamb carcasses has developed into a major business within the EU there is a demand for lambs from different parts of the country throughout the year for domestic consumption and export. This means that finished lambs have to move longer distances from their holdings to the markets and slaughterhouses. In addition, there is a substantial movement of breeding stock within the stratified breeding system. Hardy hill breeds of sheep bred and reared on the hills of north west England, Scotland and Wales are moved to improved upland farms to be crossed with longwool breeds, to produce breeding ewe lambs which are then sold as commercial breeding stock to lowland producers, usually further to the south and east. There they are crossed with more meaty breeds of ram to produce carcasses for the domestic market. Towards the end of the season (January to March), depending on prevailing prices, some of the slower growing lambs could change hands and be moved several times to where there is available feed before being slaughtered. At each stage of breeding there are the by-products of the system which are the unwanted males, which are more suited to specific export markets and will normally be moved large distances.
- 2.4.7 Another category of movements are breeding sheep which are brought off the hill to be overwintered on lower ground before being returned to the hill in the spring. Sheep, unlike cattle, are not traded in small groups, but in batches of up to 100 or more. Good transport links, large lorries and the imperative to make a profit, result in sheep moving rapidly over long distances and across international borders. Sheep from different farms are mixed to create uniform batches, so vastly increasing the number of animal contacts. The sheer scale and frequency of sheep movements for both husbandry and dealing purposes greatly

complicated the control of the disease and the transitional regulation of movements required.

- 2.4.8 Although the EU Commission is seeking to improve the identification and tracing of sheep, and the UK supports this intention, the size of the exercise in the UK and the impracticality of recording individual identifications of large numbers of sheep scattered over huge areas of land means that the UK Government believes that such identification would only be practicable if it were electronic. Work is already in hand in the EU and research into different possible identification systems sponsored by the EU will be reported to the Commission soon.

Pigs

- 2.4.9 UK pig numbers have fallen by almost 50% in the last 30 years in the face of fierce competition from more intensive production in other EU countries and the more demanding animal welfare legislation in the UK. The pig industry is now highly concentrated in the eastern arable counties of England with many fewer in the western more grass dominated areas of the country. A large proportion of the breeding herd (up to 30%) are kept in outdoor systems. More recently, as a result of market pressures, an increasing number of fattening pigs are also being kept in outdoor, more extensive units, although the overall figure is still low. Legislation introduced in 1975 to combat swine vesicular disease introduced a 21 day delay between pig movements not in a breeding “pyramid” and this has acted as an effective break on foot and mouth, giving time for clinical signs to develop and be reported before other premises are put at risk by the movement of store or breeding pigs. Most pigs move within a breeding “pyramid” and their movements, under relatively intensive conditions, are closely controlled and checked.

Markets

- 2.4.10 There have been other changes in the livestock industry. The concentration of livestock markets and slaughterhouses in the last 30 years has contributed significantly to the increase in distances covered during animal movements. There are only around 170 markets in the UK today, compared with over 800 in the early 1960s. Although there are fewer markets, the percentage of sheep sold through them has stayed constant at around 50-55% over the last 40 years. This reflects the dispersed nature of the industry and the practice of batch marketing and sales. As a result of these changes, sheep now travel further, are sold in larger markets and come into contact with more animals in the process than ever before.

Slaughterhouses

2.4.11 The rationalisation of the slaughterhouse sector has been similar both for sheep and other species. There are now fewer than 500 slaughterhouses, compared with over 3,000 in the late 1960s and many of them are now highly automated single species plants. This trend has resulted from the need to reduce costs through economies of scale in order to compete on the EU and global markets, rising hygiene standards following Britain's membership of the EU and the growing importance of large multi-national supermarket chains who prefer to buy large volumes from a limited number of quality assured suppliers. Whilst animals have to travel greater distances they are all destined for slaughter, unlike those passing through the markets. There has been a steady increase in the numbers of livestock sold direct to slaughterhouses from the farm of origin without passing through markets over the past 20 years, and now 97% pigs, 63% of cattle and 46% of sheep are sold direct to the abattoir.

SECTION 5

THE IMPACT ON THE WIDER RURAL AND UK ECONOMY

2.5.1 It was recognised early in the outbreak that the control measures were having a major impact on inbound overseas tourism and countryside recreation. On 1 March the Countryside Agency publicly estimated that rural businesses would suffer losses of £2 billion. On 6 March, DCMS, MAFF and DETR Ministers met the English Tourism Council, the British Tourist Authority and the British Hospitality Association to review the impact of FMD on the tourist industry.

2.5.2 On 14 March the Prime Minister announced that he was setting up a Rural Task Force to advise the Government on the impact of foot-and-mouth disease on the wider rural economy and the first meeting took place. The Task Force had the following terms of reference:-

“To consider the implications of the outbreak of foot-and-mouth disease for the rural economy, both immediately and in the longer term, and to report to the Prime Minister on appropriate measures. In particular to:-

- *identify the problems that the FMD outbreak is causing for the wider rural economy;*
- *draw up specific guidance for the public and businesses in accordance with veterinary advice;*
- *identify any initiatives - e.g. from the Rural White Paper - whose implementation might be brought forward to help those caught up in the crisis;*
- *identify potential new actions which would help to kick-start the rural economy again once the outbreak had been eradicated.”*

2.5.3 Until the General Election the Task Force was chaired by Michael Meacher, Environment Minister in DETR; thereafter by Alun Michael, Rural Affairs Minister in the newly-established DEFRA. It comprised representatives from a range of Government departments and agencies and from stakeholder bodies including tourism, farming, local government, small business, conservation and community interests.

2.5.4 The Task Force was established as a UK-wide body and Ministers from the devolved administrations participated. However, its work focused

primarily on England, and it was for the devolved administrations to decide whether to follow similar policies or adopt their own measures.

- 2.5.5 The Task Force sought urgently to develop measures that would assist the non-farming rural economy. Measures put in place included deferral of tax and VAT from affected businesses, support for affected local authorities to grant emergency business rate relief, and the establishment of the Business Recovery Fund and are set out in detail at paragraphs 2.5.23-2.5.44 below. They also included measures to encourage the reopening of footpaths and other visitor attractions in rural areas such as shows, historic houses, wildlife parks and zoos.
- 2.5.6 The area worst affected by the outbreak was Cumbria. The Prime Minister appointed Lord Haskins to act as Rural Recovery Co-ordinator to help local authorities and other agencies there, and he began work on 14 August. He was asked to plan for economic recovery in Cumbria and other hard hit areas like Devon and North Yorkshire, and consider what lessons were applicable to other severely affected areas. Lord Haskins' report, "*Rural Recovery after Foot-and-Mouth Disease*", was published on 18 October.
- 2.5.7 The final report of the Rural Task Force, "*Tackling the impact of foot-and-mouth disease on the rural economy*" was published on the same day, containing both a review of the impact of FMD on the rural economy and of the measures the Government had taken to address it, and recommendations for assisting the rural economic revival.
- 2.5.8 The Government responded immediately by accepting Lord Haskins' recommendation that further short-term assistance was needed, and announced a further increase in resources for the Business Recovery Fund (see paragraph 2.5.34). A comprehensive response to both reports was published as "England's Rural Future" on 13 December.

Impact on the Rural Economy

Assessing the impact

- 2.5.9 Obtaining dependable information on the way businesses were affected was difficult because of their small size and dispersed nature, although trade organisations and local task forces provided initial information. Complicating the analysis was the fact that most of the economic activity was displaced, rather than lost; instead of visiting the countryside, people from urban areas were going to the seaside or shopping instead. The activity generated in combating the outbreak also had a significant economic impact.

- 2.5.10 The Government's estimate of the impact of FMD on the economy as a whole, published in the 2001 Pre-Budget Report, was that it had reduced UK GDP by less than 0.2 per cent. However, analysis by DEFRA and DCMS suggests that losses to agriculture and the food chain due to FMD, including costs compensated for by the Exchequer, amount to some £3.1 billion. Business directly affected by tourist and leisure expenditure are estimated to have lost £4.5-£5.3 billion in gross revenues, as a result of fewer people visiting the countryside last year. The overall economic cost in these sectors - once allowance is made for savings on expenditure on inputs - is estimated as a loss of value added of £2.7-£3.2 billion, although the impact has varied between individual businesses both according to their location and to the segments of the market which they serve. However, much, but not all, of the cancelled leisure trips to the countryside appear to have been replaced by spending in other sectors of the economy, and hence the overall impact upon the UK's GDP of the fall in countryside leisure and tourism has already been relatively modest. "*The costs of FMD in the UK*" - a joint paper by DEFRA and the DCMS which sets out the basis of these estimates in more detail is being provided separately to the Inquiry.
- 2.5.11 It is acknowledged that movements in national economic indicators such as GDP mask the impact of the outbreak in the hardest-hit rural areas, and it was clear that at a local level (such as among tourist businesses of Cumbria and Devon) the immediate impact was very severe. Over 40% of businesses in Cumbria, Devon and Cornwall surveyed in April/May reported that they had been adversely affected, compared to 30% in the South West and North West as a whole. Over a third of affected businesses in the South West said they had lost more than a quarter of their revenue, and 20% of those affected in Devon said they had lost more than half. Three-quarters of hotels in the South West reported a fall in turnover.
- 2.5.12 The effect on overall unemployment in Cumbria and Devon was, however, muted, partly because of high levels of self-employment in agriculture and tourism and because the jobs lost in tourism were mainly seasonal or casual, and partly because any effects due to FMD were masked by other employment changes within these economies. The FMD outbreak had little perceptible impact on labour market data. Indeed, the latest figures show the unemployment rate (as measured by the claimant count) was 0.2 percentage points lower in Cumbria and Devon and 0.7 points lower in Dumfries and Galloway in January 2002 than in the same month a year earlier.

- 2.5.13 Department of Trade and Industry data on insolvencies also suggest little impact. In only one company insolvency case in the second quarter of 2001, and two in the third quarter, was FMD identified as the primary or secondary cause of failure. For individual insolvencies, FMD was cited as the primary cause in 7 cases, and as the secondary cause in 33 cases. Corresponding figures in the third quarter were 3 and 16.
- 2.5.14 Because of the difficulty in obtaining reliable data, DETR asked the Government Offices in each Region to commission surveys. These suggested that about a quarter of all firms were adversely affected by FMD to some extent whereas three quarters of affected firms had neither laid off staff nor reduced working hours (at the end of April). Across the country small and large firms were equally likely to have lost income, but adversely affected small firms tended to lose a larger proportion than larger firms.
- 2.5.15 DEFRA commissioned further survey work on the economic impact of FMD in September. This surveyed the impact in two districts in each of the South West, North West and East of England. Results are broadly similar to those of the earlier regional surveys. Around 40% of businesses in areas with widespread outbreaks of FMD reported being adversely affected, compared with 15% in areas with few or no outbreaks. The agriculture-related and hotel and restaurant sectors had the highest proportion of affected businesses, followed by retail and manufacturing. Among affected businesses, 44% described the impact as severe or very severe, with 21% reporting the loss of over half normal sales revenue between March and August. While most affected businesses reported that they remained profitable, 13% reported that an expected profit had turned to loss. However, two-thirds expected to be back to “business as usual” by mid-2002.
- 2.5.16 **Farming.** In addition to the direct impact on farmers whose livestock was culled, and those subject to restrictions, there was a large drop in demand for farming support services, notably haulage. Some offsetting benefit came from the use of local contractors for disease control work including slaughtering and cleansing and disinfection.
- 2.5.17 **Tourism.** In the early stages of the outbreak, hotels and other tourism-dependent businesses almost everywhere, including London, were affected by the fall in overseas visitors. An East of England economic impact survey in May reported 20% of hotels as affected, compared to 75% in the South West. The International Passenger Survey showed that for March to August 2001 expenditure by overseas residents during visits to the UK was down by around 12% compared with the same months in 2000.

2.5.18 The large majority of rural tourism income comes from domestic visitors. The UK Tourism Survey showed domestic tourism to be 25% below the 2000 level in April and May. Some of the areas most affected are also particularly dependent on tourism, notably the Lake District, Dartmoor. Chapters 5 and 6 of the Rural Task Force report discuss the causes of the impact on tourism in more detail, including how far the damage to countryside tourism was caused by access restrictions, and how far by media reports and public perceptions of the carcass disposal methods used. As restrictions were eased in the summer there was some recovery in revenue, although partly offset after September 11 by the further sharp fall in inbound overseas tourism.

2.5.19 **Other industries** Other industries, many located outside rural areas, were also affected. They included livestock hauliers and makers of farm machinery; activities dependent on countryside access, such as fishing, shooting and the horse business in all its forms; suppliers to countryside users, such as makers of outdoor clothing, hirers of marquees, cycle manufacturers, guidebook publishers, and fishing shops; and activities heavily dependent on overseas visitors such as theatres and language schools.

2.5.20 **Voluntary organisations** National and local non-profit-making and voluntary organisations dependent on countryside recreation were especially badly affected. The Youth Hostels Association forecast in September a loss of over 15% of its revenue for the year. Farm Stay UK reported in June that around half its members had not renewed their subscriptions.

2.5.21 Responding to the economic impact of FMD was difficult in part because of the lack of accurate up-to-date information about the extent of the damage being done to small businesses. Given the limitations on ad hoc surveys, much emphasis was placed in the early stages on employment statistics as a measure of trends in local economic activity. However, with the impact concentrated on sectors such as farming and tourism with high levels of self-employment, seasonal and casual work, employment data are a poor measure of the short-term losses that businesses were suffering. This is particularly so given the time that employment takes to respond to changes in economic conditions (other variables, such as overtime and pay tend to be altered first) and that there are many other factors which influence whole-economy unemployment data.

ASSISTANCE TO RURAL BUSINESSES

2.5.22 The Government introduced a series of measures to alleviate the financial difficulties of small businesses. There were several elements to the eventual package, detailed below.

Deferral of tax and VAT payments

2.5.23 The Inland Revenue and Customs and Excise announced in early March that businesses badly affected by FMD could apply to defer any tax, VAT and national insurance payments they were due to make. A helpline was set up on 21 March to enable businesses to obtain advice on all tax issues from a single source. Applications were dealt with on a case-by-case basis. This proved to be one of the most successful and popular measures to help affected businesses, because of its simplicity and because it offered an immediate and direct benefit to cash flow. The measures applied UK-wide and, following a decision taken on 10 April, businesses were not asked to pay interest or surcharges on any arrears. As of 17 February 2002 a total of £231 million in income tax, NICs and VAT payments has been deferred for periods mainly between 3 and 6 months, or exceptionally up to 24 months.

2.5.24 There has been widespread praise for the helpfulness of Inland Revenue and Customs and Excise staff, who handled over 74,000 calls and received only a handful of substantive complaints. Throughout the outbreak businesses and their trade associations understandably remained concerned over uncertainties about the timing of repayments. The Revenue Departments understand this anxiety and that some businesses will continue to face problems through the winter; They are committed to continuing to treat affected businesses in a sympathetic manner. Early research shows that a significant amount of the deferred tax has now been paid.

Business rate relief, deferral and appeals

2.5.25 Local authorities were already empowered to grant relief from rates to businesses suffering hardship. The Government increased its contribution to the cost of relief granted to businesses suffering as a result of FMD from the usual 75% to 95%, for premises with a rateable value (RV) under £12,000 in 151 districts designated wholly or mainly rural. Later, the RV ceiling was increased from £12,000 to £50,000 in 37 districts in the worst affected areas, and the scheme was extended for a further 9 months to 31 March. This increased the potential benefit per property to £21,500. The subsidy rate was also increased from 95% to 98%, in cases where the net cost would otherwise exceed 0.4% of the

authority's net budget. The total cost to central Government is estimated to be £20m.

- 2.5.26 Authorities may also defer rates payments for businesses finding it hard to pay their bills. The Government recognised that where authorities used this discretion in relation to FMD, they might face difficulty making their scheduled contributions to the national rating pool. Contributions from the 151 "rural" authorities were therefore partially deferred in the first four months of the financial year.
- 2.5.27 The introduction of proposals in the Rural White Paper to extend rate relief to more types of rural business was accelerated, at a cost of about £24m. From 5 April, 50% mandatory rate relief was extended to sole village pubs and petrol stations with rateable value (RV) below £9,000. From 15 August this was extended to village food shops with RV below £6,000. A new five-year scheme to encourage farmers to diversify into non-agricultural activities was also brought forward:- any property with a RV below £6,000, in agricultural use for at least six months in the year to 15 August, can now receive 50% mandatory relief, which local authorities may top up to 100%.
- 2.5.28 Ratepayers have a right to appeal for a temporary reduction in their rateable value where the rental value of their property is adversely affected by a cause such as FMD. The Valuation Office gave priority to settling appeals from businesses worst affected by the outbreak.
- 2.5.29 Information to assess the take-up and effectiveness of the rate relief measures remains limited. Many local authorities were slow to put schemes in place, and in the early months of the outbreak many chose instead to allow businesses to defer rate payments. Response to surveys by the Local Government Association (LGA) was uneven, and no reliable estimate of the total value to business can yet be made. However, feedback indicates that rate relief is highly regarded by businesses, due to its relative simplicity and the direct cash flow benefit it offers. The Government responded to representations from the LGA to extend the scheme's period of operation, increase the number of eligible businesses, and reduce the cost falling on the most severely affected authorities. Implementation by local authorities has however been variable (in part because small shire districts judged that the residual cost even after subsidy remained significant); and some severely affected businesses are located in districts where the higher RV ceiling of £50,000 does not apply.

- 2.5.30 There appears to have been higher take-up of the option to appeal seeking a temporary reduction in rateable value. By 25 September

73,000 appeals had been received in England citing the outbreak as the cause of a fall in value, of which 27,000 had been fast-tracked by the Valuation Office. The greater popularity of this approach - although the potential benefit may often be less than from hardship relief - may be because businesses are familiar with the appeal process, or because hardship relief is seen as “charity” as distinct from an entitlement.

Extension of the Small Firm Loan Guarantee Scheme (SFLGS)

- 2.5.31 The Small Firm Loan Guarantee Scheme guarantees loans from banks and other financial institutions and applies to UK small businesses whose turnover does not exceed £1.5m (£5m for manufacturers). Firms must have a viable business proposal and have tried and failed to obtain a conventional loan because of lack of security. In response to the FMD outbreak, the scheme was temporarily extended to a range of sectors normally excluded. The sector extension would have allowed SFLGS to underwrite £120 million in additional loans.
- 2.5.32 The SFLGS was presented as a major element in the package of assistance:- if all the additional loans were taken up, the £120 million (gross) would have represented a large fraction of the estimated £300m total benefits available to business. However, take-up of the extension was extremely modest, with only 34 new loans to date, and 91 re-scheduled. The extension remains open until 30 June 2002. The main reason appears to be that the scheme is designed to help businesses that find it hard to borrow because of lack of collateral (unmortgaged assets), whereas in the FMD crisis, the main problem has been income shortfall. Many tourism businesses in particular have significant assets but could not be confident of their ability to service existing debt, still less take on new debt.
- 2.5.33 The £120m for additional loans would not have been available for diversion to other forms of assistance (because the actual public expenditure cost would consist of any calls on the guarantee, which is much less than the gross amount lent and would not fall due for several years). This is a complex point to explain, and critics were left with the impression that 40% of the public funds available to help business were directed via a poorly targeted and under-subscribed scheme. The SFLGS overall is in fact a well-established and successful scheme, targeted at collateral-constrained small businesses. Since it started in 1981 around 80,000 loans valued at over £ 3 billion have been guaranteed.

Business Recovery Fund

- 2.5.34 The Business Recovery Fund (BRF) was designed to provide targeted help for businesses, especially small businesses. A total of £80 million (including £54m of new money from central Government) was made available. It was established in three stages:- on 14 April, with £15m funding focused on the worst-affected regions; on 7 May, with an additional £24m spread across all regions, the bulk again concentrated on those worst affected; and on 18 October, in response to the publication of the Rural Task Force and Haskins reports, a further £24m similarly targeted. Regional Development Agencies (RDAs) were asked to manage the Fund, and most were able to expand the amount available to it through reprioritisation of their existing resources (including EU Structural Funds) to give the £80m total.
- 2.5.35 The BRF was designed to provide a relatively flexible form of assistance for small businesses, tailored to the needs of individual regions and businesses. National criteria were set to ensure that assistance was given only to viable businesses and was directed towards measures that would improve their prospects after the outbreak, and not merely make up for cash-flow shortfalls.
- 2.5.36 Grants of up to £15,000 were made available for training and re-skilling employees; specialist advice and consultancy; investment to help businesses diversify and refocus their activity and to seek new markets. (The upper limit of £15,000 was set with a view to avoiding the risk of contravening EU State Aids rules, which allow *de minimis* assistance of up to E100k over 3 years; for the same reason the agriculture and transport sectors, where no *de minimis* provision applies, were excluded.) Up to £7,500 (within the overall ceiling of £15,000) could be used to help meet interest on bank loans.
- 2.5.37 RDAs adopted a variety of approaches, consistent with the national guidance, depending on the amount of funding available and the problems faced by the businesses in their region. These commonly involved a mix of components including grants to Tourist Boards and local authorities for promotion, business survival advice, and direct grant to businesses for marketing and investment and help with interest payments. Grants to individual businesses were generally channelled via BLOs.
- 2.5.38 The Fund's existence, and the element of regional flexibility, were generally welcomed, and feedback from those businesses that received

help was positive. However, there were criticisms in relation to:-

- the amount of resources made available overall;
- the relatively low upper limit (£15,000 per business), thus offering little help to medium-sized and larger firms;
- the exclusion of agriculture and transport businesses (as a result of EU State Aids rule);
- the lack of assistance with cash flow losses which many businesses saw as more critical than reinvesting for their uncertain future;
- perceived slowness in some RDAs or their Business Link contractors and alleged high level of overheads.

Charitable funding

2.5.39 The Government set up the “Charity Match Funding Scheme”, administered by the Countryside Agency, with the Government matching donations by members of the public to voluntary organisations and charities for relieving hardship caused by the outbreak. To be eligible, the organisation had to have raised at least £25,000 (later reduced to £10,000) from public donations, and explain how the money would be spent on FMD-related hardship relief.

2.5.40 The major part of the match funding went to two organisations, the Royal Agricultural Benevolent Institution (RABI), founded in 1860 for the relief of farmers and farm workers in distress, and the ARC Addington Fund, set up in response to the outbreak to help farms and other businesses dependent on agriculture. This meant that the bulk of the funds went to agricultural businesses, although from June non-farming rural businesses were also eligible for help from the Addington Fund. Out of total matched funding of £14m, RABI received around £7.6m, and ARC Addington received £4.8m.

2.5.41 There was widespread praise for the matched funding scheme, and for the effective help delivered by the charities. Concern was expressed, however, that money was going only to the agricultural sector, when others, especially in the tourism sector, were also experiencing hardship. The slowness in extending help beyond farmers partly reflected the initial perception that FMD was a crisis for farming alone, and partly the coherence of the farming community and its associated charities relative to non-farming businesses, with for example no national body acting as

the voice of small B&B proprietors. The fund organisers, particularly ARC Addington, responded with increasing sensitivity as the outbreak developed and began to help a wider target group.

Other measures

2.5.42 In FMD-affected areas throughout Britain, Job Centres offered “one-stop shop” advice on benefits and jobs for people from industries affected by the outbreak. On 11 April, DfEE launched ‘Rural Skills Action’, a new national service giving personal advice to rural and leisure industry workers. The service aimed to improve skills among workers temporarily laid off in the then worst-affected areas, and provide job search and re-skilling advice to people across Britain who had lost their jobs permanently. Take-up of Rural Skills Action, however, remained low. There is a widely-recognised need to improve skills in tourism, farming, and other rural businesses. However, there is also a high level of self-employment and seasonal employment. Because of this, it appears that, relative to the scale of business losses, very few permanent staff - the potential client group for Rural Skills Action - were made redundant or laid off, and those who were could mostly find other jobs.

2.5.43 In November, the Department for Trade and Industry launched the Development Fund for Rural Renewal, part of the Phoenix Fund, to help FMD-hit business communities revive their fortunes. The £3m Fund is managed by the Small Business Service who are currently assessing bids.

2.5.44 As noted above (paragraph 2.5.20), many voluntary organisations, especially those promoting countryside access such as the Youth Hostels Association and the National Trust, suffered severely from the impact of restrictions on access, but were ineligible to benefit from measures mainly designed to help affected businesses. In February 2002 DEFRA established a fund – the Countryside Access Recovery Fund, with £0.5m available for grants, administered by the Countryside Agency – designed specifically to help voluntary bodies affected in this way. Some of the organisations concerned also benefited from grants provided by the Countryside Agency direct.

TOURISM

2.5.45 Tourist businesses, especially but not only in rural areas, lost a substantial part of their income as a result of the outbreak. In areas such as the Lake District some reported 80-90% falls in revenue in March and April. Some recovery was apparent by May, but significant losses continued throughout the main tourism season.

2.5.46 The Government and relevant agencies initiated a package of financial assistance, information and publicity to try and restore confidence in tourism and visiting the countryside. On 11 April the Department for Culture, Media and Sport (DCMS) set out a recovery strategy which focused on tourism as a national industry and incoming tourism to Britain as a whole. DCMS gave the English Tourism Council £3.8m for immediate recovery work, including research, information and promotion, and gave the British Tourist Authority £14.2m for a publicity campaign to attract back overseas visitors. Regional Development Agencies could also use the Business Recovery Fund to support regional promotional campaigns, and several did so.

Publicity and information

2.5.47 The then Tourism Minister, Janet Anderson, visited New York with industry representatives from 20-22 March to try to counteract negative USA media coverage. The Prime Minister and other Ministers sought to convey the message, at home and abroad, that Britain was open for business.

2.5.48 A series of public information advertisements appeared in national and regional media from 22 March. DCMS issued guidance for people operating visitor attractions which played a part in ensuring that almost all the major attractions were open by Easter. A public information leaflet and poster was widely circulated to Post Offices, tourist offices, libraries and Citizens Advice Bureaux. The Deputy Prime Minister John Prescott, Michael Meacher and other Ministers undertook a series of visits to publicise openings of rights of way.

2.5.49 The English Tourism Council (ETC) set up an England visitor helpline on 22 March to reassure and direct callers to sources of the most up-to-date local information on where to visit and what to do; this received over 45,000 calls. The Countryside Agency, with the help of the ETC, established a weekly update service for Tourist Information Centres, circulating the current status of rights of way, National Parks and National Trails electronically via regional tourist boards. Tourist Information Centres were provided with detailed local information by local authorities. The Central Office of Information set up a website with information about visitor attractions:- this received 6m “hits” from March to September. It was linked to the Countryside Agency’s site which received 215,000 hits, and provided links to local authority sites giving details of open footpaths and other local attractions. The ETC also engaged in extensive PR activity including over 900 radio and TV interviews and 2000 press articles.

- 2.5.50 The British Tourist Authority (BTA) invited 60 of the world's tourism and travel leaders from the UK's nine most significant overseas markets to a special VIP programme in Britain in mid-April. This resulted in foreign media coverage estimated to be worth over £47 million, including BTA press conferences jointly with UK embassies for the local media.
- 2.5.51 Public perceptions nevertheless remained a serious problem. In an English Tourism Council (ETC) survey in late August, 24% of those asked agreed that "most places in the countryside are closed"; 54% that "people should keep out of the countryside to avoid spreading FMD"; and 35% that "you couldn't enjoy going to the countryside because you would see the destruction and disposal of animals". This was even though almost all major visitor attractions were open by Easter, burning of animal carcasses had ceased in May, and over 90% of footpaths were open.

FOOTPATHS AND COUNTRYSIDE ACCESS

- 2.5.52 There are 190,000 kilometres of public rights of way in England, many of them little-used field paths, which nevertheless may be significant in attracting visitors to rural areas - especially hill and coastal areas.
- 2.5.53 At the start of the outbreak, its potential size was unknown. In consequence, it was decided on 27 February to give local authorities powers to close footpaths and bridleways not only in Infected Areas, but also outside them, subject in the latter case to clearance with MAFF. Many other countryside activities dependent on access to farmland, such as hunting were prohibited, others, such as equestrian events were voluntarily suspended, and many visitor attractions - especially but not only where there was a risk of contact with livestock - were closed.
- 2.5.54 A strong message went out from central Government and farmers' organisations that rural footpaths should be closed. The NFU called on local authorities "to close off rural footpaths and rights of way to stop the spread of foot and mouth disease". NFU regional offices contacted authorities to urge them to use the powers. The Prime Minister and the Minister of Agriculture appealed to the public to stay off farmland and to avoid contact with animals.
- 2.5.55 The first formal guidance from MAFF to local authorities, in a circular dated 6 March, said "[Power to restrict access outside Infected Areas] should only be used where there is evidence ... that to allow such unrestricted access would pose a potential risk of spreading the disease."

- 2.5.56 Given the power to close paths, and the encouragement to use it, almost all local authorities adopted a precautionary approach and did so. Many used “blanket” powers, enabling them to close all paths without having to erect signs on individual paths. By early March, almost all paths were closed, including some even in towns and many in woodland and across arable land. The damaging impact on countryside tourism and the businesses that depend on it, especially in popular walking areas, rapidly became apparent. In some areas visitor numbers fell to nothing:- few people stay in the remoter Lake District valleys except to walk in the hills.
- 2.5.57 From late March the Government moved to encourage reopening of footpaths in line with published guidance based on a veterinary risk assessment. On 28 March, following discussions with representatives of councils, countryside users and landowners, MAFF issued guidance to local authorities on public access to the countryside. This provided a framework, based on a veterinary risk assessment, for assessing which paths could be reopened. The proposed approach involved consultation with landowners and managers and detailed risk assessments by authorities, and use of mitigating measures such as fencing where appropriate. A code for walkers was distributed widely by the Countryside Agency.
- 2.5.58 Progress remained slow. By Easter (15 April) only 14% of the network was open. On 25 April the advice was amended and supplemented by a detailed matrix and procedure for local risk assessment. Beverley Hughes, Parliamentary Under-Secretary in DETR, met individual authorities to try to persuade them to reopen paths. Government Offices held seminars for local authorities, along with MAFF veterinarians and the Countryside Agency. Also on 25 April, the Government provided £3.8 million to the Countryside Agency to help local authorities and National Park authorities reopen rights of way, by providing 75% of the cost of work such as fencing to help reopen paths and access land, and better public information.
- 2.5.59 Throughout May more paths reopened, but there were still some areas with no cases of FMD but very few paths open. On 17 May only 26% of paths were open. Meanwhile, the Veterinary Risk Assessment was revised in response to the sharp decline in the number of cases and the summer weather which reduces the survival rate of the virus. On 23 May, guidance was issued, based on the revised risk assessment, this time stating clearly that where there were no recent cases, local authorities should make rapid progress towards reopening all of their rights of way, outside 3km Protection Zones around Infected Premises.

The proportion of paths open began to rise more rapidly, to 42% for the late May Bank Holiday and to 64% by 25 June.

2.5.60 Local authorities' response to the Government's pressure varied. Some were keen to encourage visitors back, and reopened promptly, prioritising popular paths, trails and public access areas. Many others acted with extreme caution, in line with the views of local farmers. Some counties had no cases of disease but were most reluctant to reopen footpaths, even on arable land. While NFU and CLA leaders nationally did not dissent from the Government's approach, many farmers retained an acute fear that walkers would transmit infection and were reluctant to allow anyone onto their land. Some confusion was caused by advice to farmers to keep visitors to a minimum as part of maintaining tight biosecurity precautions:- this was directed at visitors to the farmstead who were likely to have direct contact with animals, but was easily misinterpreted as applying to walkers. There was some countervailing pressure from bodies representing ramblers and hoteliers, but it was much more muted, and threatened mass trespasses did not materialise.

2.5.61 Following the General Election, Alun Michael, Minister of State for Rural Affairs, and other ministers continued to stress that closures of footpaths or other land should not be out of proportion to the risk. With effect from 20 July the Government revoked the local authority closures subject to exceptions in those counties most affected by the disease if authorities could show good reason, in terms of disease control or the logistics of re-signing. This resulted in the proportion of paths and access land open rising to 85%. This increased to 92% by early October and to 99.5% by mid-February as local authorities continued to respond, and infected area status was progressively lifted. Further revised guidance was issued in early February which will mean that only a very few paths will need to stay closed for up to 12 months after the farm was infected.

SECTION 6

VACCINATION

EU Framework

2.6.1 EU policy on the control of foot and mouth disease is set out in Directive 85/511/EC (as amended). It provides for a policy of stamping out the disease by rapid identification, movement controls, tracing of infection and slaughter of affected animals. Use of foot and mouth vaccines is prohibited unless specifically authorised by Commission Decision following confirmation of the disease. The relevant part of the legislation is Article 13 which states that:-

“... It may be decided when foot and mouth disease has been confirmed and threatens to become extensive, that emergency vaccination using technical procedures guaranteeing the animals’ total immunity may be introduced. In this case the measures to be taken shall include:-

- *the extent of the geographical area in which emergency vaccination is to be carried out;*
- *the species and the age of the animals to be vaccinated;*
- *the duration of the vaccination campaign;*
- *a specified standstill of vaccinated animals and their products;*
- *the special identification and registration of the vaccinated animals;*
- *other matters appropriate to the emergency situation.”*

The Decision to introduce emergency vaccination should be taken by the Commission in collaboration with the Member States concerned, acting in accordance with the procedure laid down in Article 16 (Standing Veterinary Committee procedure i.e. qualified majority vote).

This Decision shall have particular regard to the degree of concentration of animals in certain regions and the need to protect special breeds.”

However, by way of derogation from the first sub-paragraph, the decision to introduce emergency vaccination around the outbreak may

be taken by the Member State concerned, following notification to the Commission, provided that basic community interests are not endangered. This decision shall be immediately reviewed in the Standing Veterinary Committee in accordance with the procedure laid down in Article 16.

- 2.6.2 There are a number of possible approaches to vaccination. A programme might be “suppressive” which generally means that the animals would be subsequently killed, or “protective” where the vaccinated animals would be allowed to live out their economic lives. Vaccination strategies include ring vaccination, firebreaks or buffer zones, and prophylactic vaccination. Ring vaccination is within a boundary drawn to circle an area of known infection. The aim of a firebreak or buffer zone is to establish a vaccinated area between a diseased and disease-free area to protect against the spread of the FMD virus. Prophylactic vaccination is generally used in endemically infected countries.
- 2.6.3 The EU framework allows a number of possible approaches to vaccination in the face of an outbreak. The most common consideration given to emergency vaccination within this legal framework is ring vaccination around a localised outbreak to damp down the infection and prevent its further spread. Normally under this approach the vaccinated animals are slaughtered, once the outbreak has been controlled in order to facilitate a quick return to FMD-free status. The EU legal framework does not provide for prophylactic vaccination in the absence of confirmed disease. In the EU, vaccination is a tool available to address an emergency situation, but in addition to, rather than instead of, other control measures.

Consideration of Vaccination in this outbreak

- 2.6.4 The Prime Minister, in early March, commissioned MAFF to consider the options and provide advice on the use of vaccination both generally and in specific areas. From that time vaccination was fully under consideration, and the logistics of implementing a programme were worked on. In the initial stages of the outbreak the advice to Ministers was that although vaccination was available as an additional option to control the disease, it was not likely to be as effective as stamping out in the particular circumstances faced at that time. Ring vaccination was thought unlikely to be effective in preventing the spread of infection in the early stages given that the outbreak was widely spread from the outset and vaccination in heavily infected areas was likely to be less effective in controlling the disease than rapid identification, tracing and slaughter. The Commission’s likely restrictions and controls on animal movements out of the vaccination zone and the implications of

vaccination for lengthening the period before which exports of livestock and meat might resume under international trade rules were important factors.

Cumbria and Devon

- 2.6.5 However, as the disease progressed in the first month of the outbreak the situation in the most heavily infected areas of Dumfries and Galloway and Cumbria, centred on the Solway Firth and Penrith Valley, changed this assessment. Two major factors influenced the development in March of advice to Ministers; the first was the need for ever greater resources, particularly vets, to deliver the policy of slaughtering infected premises within 24 hours and contiguous premises within 48 hours, the second was the knowledge that cattle would be turned out of winter housing on to pastures and into close contact with sheep in the second half of April.
- 2.6.6 The Minister of Agriculture announced in a statement to the House of Commons on 15 March a policy of slaughtering all sheep within a 3km zone around an IP in the heavily infected area of North Cumbria on the basis that the heavy weight of infection in the area meant that animals in the 3km zone had been exposed to disease. This was being implemented, but, due to resource problems and some reluctance from farmers to allow their animals to be culled, was taking longer than anticipated. There was concern over the possibility of surge in new cases when the cattle were turned out leading to greater pressure on resources and more problems over disposal, particularly in relation to older cattle which, because of the possibility of BSE all had to go to rendering.
- 2.6.7 The possibility of a protective vaccination strategy began to be considered, under which vaccinated cattle would be left to live out their normal lives. This would differ from the more usual approach of subsequent slaughter, as adopted in the Netherlands in their part of this epidemic, when vaccination is used as an instrument to control the spread of disease and the animals are culled so that FMD free status can be regained as quickly as possible.
- 2.6.8 Another factor contributing to changing the way vaccination was considered was the assessment that, given the scale of the outbreak and the extent of infection in sheep, the process of the UK regaining FMD free status was, even without vaccination, likely to be prolonged because of the difficulty of demonstrating that sheep were free from disease.

Logistic Considerations

- 2.6.9 While advice on the policy of vaccination was developing, work was going ahead on the logistics of mounting a vaccination programme. It was decided that this should be contracted out to ADAS Consulting. ADAS recruited and trained people locally in Cumbria and Devon to work under veterinary supervision (and the Scottish Agricultural College recruited and trained people in Dumfries and Galloway).
- 2.6.10 It had been decided early on that there was no need for vaccination to be carried out by qualified veterinary surgeons. With the agreement of the Royal College of Veterinary Surgeons, a statutory instrument was prepared (but not in the event made) which would have removed the requirement for vaccination to be carried out only by veterinary surgeons, but which would have required vaccinators to receive suitable training and to work under veterinary supervision. It was therefore planned that this supervision would be provided by LVIs and TVIs and under these supervision arrangements it would have been possible for farmers to vaccinate their own animals. Although managing vaccination programmes in Cumbria and Devon would have required 55-70 and 50-60 vets respectively, these numbers were available from about the middle of April because of the vets coming from overseas, but would not have been available earlier. Veterinary resource will, in most circumstances be a limiting factor in managing a vaccination programme.

Impact of Vaccination

- 2.6.11 Post vaccination controls also needed to be considered fully. Those that would have been required had vaccination gone ahead are set out in Commission Decision 2001/257/EC of 30 March 2001. Meat from vaccinated animals would have had to be heat treated during the first 30 days following vaccination and then deboned and matured for 24 hours for a period of 12 months from vaccination or from the last confirmed case of the disease in the vaccination zone. For a period of 12 months milk from vaccinated animals would have had to be pasteurised; in the first 30 days following vaccination pasteurisation would be required within the vaccination zone unless otherwise authorised in exceptional circumstances. The taking of semen, ova and embryos from vaccinated animals would have been forbidden. Vaccinated cattle would not have been permitted to move out of the vaccination zone for 12 months, except under licence to slaughter. The impact vaccination might have had on the UK's prospects of resuming exports of live animals and meat was at that stage of the epidemic difficult to assess.

- 2.6.12 The practical implications of these controls on meat and milk was worked through in detail with industry representatives and enforcement authorities, such as the Meat Hygiene Service and local authorities when considering vaccination for Cumbria. They were also the subject of intensive discussions with farming organisations, representative bodies and major companies in the processing and retailing sectors.
- 2.6.13 In relation to meat it seemed unlikely that there would in practice be any market for a heat treated product; so the controls would effectively amount to a 30 day standstill on sending animals to slaughter. Beyond that the requirement to debone and mature beef, was technically feasible and there was a precedent for it in the Date Based Export Scheme (DBES). However, meat going into the DBES has tended to be a top quality product destined for the restaurant trade at a premium price. Introducing such a requirement for all meat from a given area would have been a very different proposition and the trade estimated that the separate processing would have added 10-15% to the cost. This would have made such meat inherently less marketable and therefore provided a significant obstacle to vaccination, both to farmers and to retailers. For lamb and pork, concerns were to emerge later in the outbreak that deboning lamb would be uneconomical and the boning and maturation requirements were impractical for pork.
- 2.6.14 Practical problems for milk would not have been as great, as pasteurisation is the way most milk in the UK is treated. However, the geographical restriction on where milk could be processed during the first 30 days was a major problem. Although Cumbria and Devon are both significant milk producing areas neither had sufficient processing capacity to process the milk produced there. Even if there had been, the disruption of normal commercial patterns would have made the collection and distribution of milk very difficult. The food industry expressed serious concern that even after the first 30 days there might be potential problems with the use of milk from vaccinated cows, in particular the threat to export markets, adverse consumer reaction and the image of UK food abroad.

The Position in Cumbria

- 2.6.15 Against this background veterinary advice to MAFF Ministers on 27 March was to vaccinate cattle in North Cumbria. This was communicated by them to the Prime Minister on 27 March. On 28 March, Commission authorisation was secured on a contingency basis at the Standing Veterinary Committee (SVC) to vaccinate cattle in the heavily infected areas of North Cumbria and if necessary Devon and to reserve vaccine for GB use. Cattle were already individually identified

and the need to identify individual animals post vaccination could be met. The CVO and CSA both recommended that vaccination should be used in particular specified circumstances and if certain criteria were met. In April, in the light of this advice, the Government accepted the case for vaccinating cattle in North Cumbria and Devon because of the intensity of infection in those areas and the forthcoming turnout of cattle from indoor housing to outdoor grazing; but only if the vaccination programme were supported by a substantial majority of the farming community, by veterinarians, by the wider food industry and by consumers.

2.6.16 During April there was not only consideration of vaccination within Government, but also wide ranging and vigorous public debate. The uncertainties about its effectiveness, impact and long term results fuelled the debate which was dominated by two approaches - the main stream farming organisations, particularly the NFU, which remained firmly and publicly opposed throughout the epidemic while spokesmen from a range of animal rights and specialist farming organisations (organic, rare breeds) campaigned for vaccination either because they objected in principle to the slaughter policy or because they saw vaccination as a way of guaranteeing protection from disease for particular groups of farm animals. Wider rural interest groups, particularly tourism interests, campaigned hard for vaccination in the belief that it would allow footpaths to be reopened sooner.

2.6.17 The complications over the marketing of produce post vaccination meant that neither the farming organisations nor the major retailers could be reassured about the sale of produce from vaccinated animals and neither group was therefore prepared to support the proposals. While discussions continued, some cattle in Cumbria were found to have FMD as a result of lapses in biosecurity, while other cattle were let out and unaffected. With farmers and retailers strongly opposed and the hoped for benefits of protecting housed cattle by implementing the programme diminishing over time, it was apparent by 23 April that the criteria of support for a vaccination programme could not be met. Mounting a vaccination campaign without the full support and co-operation of farmers, whose assistance would be needed in managing the logistics of the vaccination operation itself and looking after the animals thereafter; and the food retailers who would have provided the outlet for meat and milk from the vaccinated animals, would not have been possible.

The Position in Thirsk

2.6.18 Later in the outbreak some consideration was given to vaccination in relation to the subsequent outbreaks at Settle and in Thirsk. In Thirsk with a restricted infected area in place, it was considered that a vaccination plan might be necessary to protect the pig units in North Yorkshire and Humberside. The success of the biosecurity controls in the Thirsk RIA which contained the infection meant that although considerable work was done on how a vaccination programme might be introduced to sweep from the south towards the Thirsk outbreak, the sort of detailed planning which had been done for Cumbria did not take place, because it was unnecessary.

Other Considerations in introducing a Vaccination Programme

2.6.19 Implementing any programme of vaccination is dependent upon the availability of vaccine. 500,000 doses were available from the International Vaccine Bank, plus half the 5million doses of O strain vaccine in the European Vaccine Bank (EVB) which might have been available. Given the possibility of wastage this meant that about 1.5-1.6million doses would be available, but this would be insufficient to cover all the cattle in the main infected areas. It was clear that the availability of vaccine would be a major limiting factor. Further commercial stocks of the O1Manisa vaccine were therefore procured in order to build up supplies to a level sufficient to provide for the most likely vaccination scenarios and to provide a buffer against the time it takes to manufacture and test vaccines in compliance with UK veterinary medicine marketing rules.

2.6.20 The use of vaccine in the control of the disease would take training and administrative time so that, for example, it would normally have taken nine days to mount a vaccination programme, from a cold start. During April, preparations were begun in Cumbria so that a programme could have been started in three days.

2.6.21 There is a special EC Decision 2001/303/EEC for vaccination of endangered species and there were requests for vaccination made under it. On each occasion the Decision did not apply and this was fully explained to the applicant.

2.6.22 The importance of providing clear and full information to the public was emphasised during the time of public debate. Detailed information, including the answers provided to the NFU's 52 questions was put on the MAFF website in April to encourage informed debate. Further advice on the science of vaccination was published on the DEFRA

website in September in response to continuing detailed scientific questions and confusion on some issues.

SECTION 7

CONTROLLING THE DISEASE

Introduction

- 2.7.1 This section sets out the policies that were developed and followed in order to eradicate the disease. The size of the epidemic meant that the logistics of the culling and disposal operation were on a very much larger scale than ever undertaken before and as a result required different approaches to be developed, particularly in the disposal operation.
- 2.7.2 The slaughter policy was always to cull infected animals as quickly as possible. It developed as the scientific advice based on the epidemiological models confirmed the importance of culling infected animals as quickly as possible, with a target of 24 hours from report. However, even within this framework the statutory requirement for humane slaughter remained and was emphasised in instructions to veterinary staff. The location of some culling operations made these instructions particularly important. As the disease spread and controls needed to be tightened there was great pressure to address obstacles to rapid slaughter. In some places these included valuation issues and these are therefore also set out in this section.
- 2.7.3 The nationwide movement restrictions introduced once the extent of the disease was discovered, prevented animals going for slaughter for the first week of the epidemic. These were relaxed as veterinary risk assessments indicated that the disease risk from such movements could be managed if appropriate precautions were taken. However, other restrictions remained in place throughout the epidemic and are set out in this section. The effectiveness of these controls depended on all concerned obeying the restrictions and there being sufficient enforcement action. They were progressively relaxed as the outbreak declined through the summer. However, the controls on movement caused welfare problems, which were alleviated by the introduction of movement licences and of the Livestock Welfare Disposal Scheme.
- 2.7.4 At the start of the outbreak the disposal operations developed during the 1967/68 outbreak were employed and work was started to bring rendering on stream. However, the scale of the outbreak and the need to protect the environment limited the use of burn and burial on-farm and different options were developed. The whole story of the disposal operation is set out in this section.

Slaughter Policy

- 2.7.5 Throughout the outbreak, the Government pursued a ‘stamping out’ or slaughter policy as the primary method of combating FMD, but with the aim of killing no more animals than necessary to control the disease. However, the changing nature of the disease and the availability of resources led to certain modifications to the policy during the course of the outbreak.
- 2.7.6 The core of the slaughter policy at the beginning of the outbreak was the slaughter of animals on Infected Premises (IPs) and the tracing and slaughter of susceptible animals with very recent direct or indirect contact with affected animals. Within the scope of this policy there were four main phases of policy development: -

Phase One of the Slaughter Policy – 20 February 2001 – 15 March 2001

- 2.7.7 From 20 February, when the slaughter of the infected pigs at Cheale Abattoir was carried out, the slaughter policy was to investigate all reported cases, confirm disease and destroy all clinically infected animals and susceptible animals on the premises as soon as possible after the disease was confirmed. An extensive programme of tracing all dangerous contacts (DCs) to an infected premises was immediately put in operation. Potential dangerous contact premises were neighbouring premises to IPs and other premises where there had been movement of livestock, personnel or equipment from, or to the infected premises. Therefore from the start a large number of animals on contiguous premises were taken out as dangerous contacts. Standing instructions set out that such animals were to be slaughtered if, because of their close proximity to the IP, it was considered that they had been exposed to the disease. Livestock premises within a 3km area of IPs were also visited by veterinary officers to check for signs of infection.

Phase Two – 15 March 2001 – 26 April 2001

- 2.7.8 By 15 March, increased epidemiological evidence was available, giving a more detailed picture of how the disease was spreading in different areas. Veterinary advice on the basis of this information led to a modification of the original slaughter policy. Nick Brown, then Minister of Agriculture, Fisheries and Food, identified to the House of Commons a five point control plan to combat the disease, which can be summarised as follows:-
- To keep disease out of those areas of the country still free of FMD;

- To halt the spread of disease in Devon by intensifying surveillance patrols to all farms within 3 -km of infected premises;
- To stop the spread of disease in the north of England and south-west Scotland through the slaughter of sheep in Cumbria and Dumfries and Galloway within 3km of an IP on the grounds that they would have been exposed to infection, due to the density of disease in that area;
- Minimise the spread of the disease from Longtown, Welshpool and Northampton markets by slaughtering flocks that received sheep from these markets as dangerous contacts;
- To eliminate infection in flocks that have passed through dealers known to have handled infected flocks by slaughtering flocks that received sheep from these dealers.

The Minister added that this strategy would be kept under constant review.

2.7.9 During the next few days there were small adjustments and additions to the slaughter policy. In Cumbria the introduction of the 3km cull was delayed to allow progress to be made in dealing with the backlog of carcasses awaiting disposal and to deal with the very dramatic escalation of new cases.

2.7.10 On 21 March the Minister set out to the House actions taken by MAFF to speed up the response to the increased number of confirmed cases. These included allowing vets on the ground to slaughter on suspicion, without needing to wait for a decision from a vet in the DECC at Page Street which until then had been necessary before any slaughter took place; allowing for a reduction in the turn-around time for 'dirty vets' (vets who had been on infected premises) from 5 to 3 days and introducing a standard valuation tariff, to reduce delays to slaughter whilst valuation took place.

2.7.11 On 23 March the first epidemiological studies were published by teams from Imperial College, Edinburgh University. These models confirmed that the single most important intervention that could be made against the disease was to set the report-to-slaughter target for infected premises at within 24 hours. The second priority was to cull contiguous premises within 48 hours of report of the infected premises. This formally confirmed views on the importance of rapid report to slaughter that had been held since the beginning of the outbreak, but placed specific figures

on these targets for the first time. Professor King confirmed the Prime Minister's support for these targets at a Press Conference on 23 March and on 27 March the Minister, in the House of Commons, confirmed the Government's policy as follows:-

- Culling all susceptible animals on infected farms within 24 hours of the initial report of suspicion of infection;
- Culling all susceptible animals on contiguous farms within 48 hours;
- Concentrating efforts in northern Cumbria for clearing all animals identified for slaughter and on creating a firebreak south of the worst affected area. However, no firebreak cull was ever completed.

2.7.12 On 6 April, instructions were issued to the field confirming the detail of these requirements in relation to animals on contiguous premises. The procedures to follow in the event of a refusal from the farmer to allow the slaughter of his/her stock were as follows:-

“A rapid assessment should be carried out by a veterinarian in order to:-

- (a) confirm whether or not the premises is in fact contiguous. There are geographical issues (such as a significant area of woodland being in the way) which may affect this judgement; and*
- (b) confirm the veterinary assessment that the livestock on the contiguous farm concerned appear in any way to have been exposed to infection. The fact that animals have been housed does not in itself mean that they have not been exposed to infection.*

This is against the background of the general judgement, in all the circumstances of this epidemic, that susceptible animals on contiguous premises will have been exposed to infection.”

Phase Three - 26 April 2001 – 21 May 2001

2.7.13 By early April the daily number of cases had peaked and had started to decline. On 19 April, the day that the first Order shrinking infected areas was made, COBR noted that there was growing concern and opposition in the regions focussing on the proportionality of the policy of slaughtering all cattle on contiguous premises. Modelling suggested that although the signs were encouraging, only the full strategy, including the contiguous cull policy would successfully deal with the disease.

2.7.14 Also on 19 April, Professor King announced at a press briefing that there was increasing evidence that the disease was under control. He explained that the declining numbers of new cases could potentially release veterinary resources for surveillance patrols and inspections.

2.7.15 Following a decision in the evening of 19 April, COBR on 20 April discussed the implementation of a possible change in the emphasis of the contiguous premises policy for housed cattle. It was proposed that cattle housed in sheds more than 100 metres away from an infected premises boundary could be considered by local veterinary staff as not having been exposed to disease, if there had been no animal movements on or off the premises and if it could be demonstrated that the farmer had operated strict biosecurity measures. It was noted that this would gain support from farmers but would require close veterinary surveillance.

2.7.16 On 23 April a minute was sent to all RODs and DVMs asking for their comments on the proposed amendment to the contiguous cull policy. The main feedback from this consultation exercise was the view that housed cattle were at a lower risk of contracting FMD and they should be exempted from the CP cull. It was felt that the high level of opposition of cattle farmers to the CP cull, particularly in Cumbria, which in some cases was leading to the critical situation in which MAFF officials were denied access to farms to check for disease, would be reduced by this proposed amendment.

2.7.17 On 26 April the Minister announced to the House of Commons the refinement of the CP culling policy. The revised approach was explained in an instruction to DVMs and RODs as follows:-

- On confirmation of disease (clinically or through a positive test result) all dangerous contacts and contiguous premises to the IP should continue to be identified;
- Dangerous contacts (via known movements of animals, personnel, vehicles, equipment etc or potential airborne spread) should be culled as previously instructed. This covered a number of contiguous premises;
- On other contiguous premises, susceptible animals should continue to be culled, subject only to the following limited exceptions, based on local veterinary judgement:-
 - (a) Cattle may be spared if there is adequate biosecurity. This was a matter for local veterinary

judgement taking into account advice issued jointly by MAFF and farming organisations. Cattle should not be regarded as meeting this criterion if they had since 1 February grazed within 50 metres of the boundary of the infected premises;

- (b) A strictly limited exception for rare breeds of sheep and hefted sheep of particular genetic merit provided that they can be isolated from other susceptible livestock and managed in compliance with tight biosecurity;
 - (c) As now, and in accordance with the Animal Health Act, where there is insufficient reason to consider that animals on the premises have been exposed to disease.
- In accordance with EU requirements, where cattle on contiguous premises are not killed, they should be subject to regular veterinary inspections every 48 hours for the first eight days after confirmation of the infection of the IP and thereafter once a week until three weeks after the preliminary cleansing & disinfection of the infected premises.

However, despite these modifications, the 48 hour target remained in place for those contiguous culls that were still considered necessary and was regarded by the CSA as the benchmark for the successful rapid containment of the disease.

Phase Four – 21 May onwards

2.7.18 By 21 May, the daily decline in the number of new cases of FMD in Cumbria suggested that the worst of the epidemic was over and that veterinary and other resources would now be more readily available to carry out serological testing where necessary. As a result it was possible further to refine the culling policy in the light of the availability of these additional resources.

2.7.19 By this stage, the 3km culling policy announced by the Minister on 15 March in Cumbria, Dumfries and Galloway had been effectively completed in Scotland. However in Cumbria it had not been completed, although substantial numbers of animals had been removed as part of the cull in the confluent areas formed by the coalescence of the 3km protection zones around IPs. All the indications by 21 May were that the

epidemic was declining in Cumbria. Given the removal of a substantial weight of infection in sheep, it was decided that it would be possible for the remaining flocks in this area to be serologically tested before reaching a decision on whether or not to cull. Evidence of seropositive animals in the flock would mean that the flock had been exposed to infection and the flock would be slaughtered out as dangerous contacts. At slaughter an investigation would be carried out for evidence of disease. If disease was confirmed, the procedures for confirmed cases would be followed. In the remainder of Cumbria (outside 3km zones) the national culling policies were applied.

2.7.20 On 24 May, an Emergency Instruction was sent to the Cumbria DCC and to all RODs and DVMs, informing them of this refinement.

2.7.21 On 10 October the procedures for dealing with Slaughter on Suspicion (SOS) cases were changed. Before a decision was reached on whether to reject the possibility of FMD, confirm or slaughter a herd as an SOS, veterinary staff in the field were required to obtain a second opinion, obtain a detailed clinical history and carry out a comprehensive clinical examination of a sizeable number of animals on the holding. This reflected the fact that there was less chance of suspicion being realised, because of the decreasing number of cases.

2.7.22 On 12 November this procedure was further amended to the effect that a senior Vet in Page Street had to be consulted before report cases were confirmed as FMD on clinical grounds or treated as an SOS case.

2.7.23 On 18 December the “Testing on Suspicion” policy was introduced. This provides that holdings which cannot positively be excluded as FMD cases or which cannot reasonably be taken as SOS, should be placed under movement restrictions while the individual affected animals are killed and samples submitted for laboratory examination. This is intended to provide greater confidence that negatives are truly negative without the need to kill the entire herd/flock to prove the case. Where there is genuine suspicion of disease, but where the signs presented are not sufficient to allow confirmation on clinical grounds alone, the whole herd/flock will continue to be dealt with as an SOS case.

2.7.24 These changes reflect two concerns:- the fact that at this time of year animals are more likely to exhibit signs of oral trauma because of the type of feed they have access to and might have lesions that could be mistaken for FMD; and that with no cases since 30 September there might be a reluctance to report suspicion of FMD in case this led to the slaughter of the whole flock. Such reluctance might also carry the possible risk of allowing disease to spread and needed to be addressed.

Welfare at Slaughter

2.7.25 Throughout the outbreak the statutory requirements for humane slaughter remained. A welfare consultative forum with the RSPCA, Humane Slaughter Association and Compassion in World Farming was established by Elliot Morley which met regularly to review the situation. Guidance on humane slaughter was produced by the Humane Slaughter Association and issued to slaughter teams, and the RSPCA undertook spot checks at slaughter sites, including Great Orton.

Valuation and Compensation of Livestock

2.7.26 The legal basis for the payment of compensation is set out in Schedule 3, paragraph 3(2) of the Animal Health Act 1981. This states that “*The Minister shall for animals slaughtered under this paragraph pay compensation as follows:-*

- (a) *where the animal slaughtered was affected with foot-and-mouth disease the compensation shall be the value of the animal immediately before it became so affected;*
- (b) *in every other case the compensation shall be the value of the animal immediately before it was slaughtered”.*

‘Value’ is not defined but is interpreted as the market value.

2.7.27 The original ‘Diseases of Animals (Ascertainment of Compensation) Order dated from 1959 and during the outbreak five different Statutory Instruments (SIs) amended the valuation policy. The most significant of these SIs was the ‘Foot and Mouth Disease Ascertainment of Value Order 2001’ which came into force on 22 March, at a time when cases were averaging 40 a day. This introduced a table of standard values for various categories of animals which could be used as an alternative to having animals individually valued by a valuer.

2.7.28 This was required because of the time taken to carry out and agree a valuation for stock, which had to be done prior to slaughter and had been identified as one potential bottleneck, which was contributing to failures to meet the slaughter targets. The standard rates for animals were therefore intended to speed up the valuation and thus the slaughter process. They were set on the basis of pre-FMD average market price for quality stock. Trade bodies for breeding stock were consulted where no published market price was available.

- 2.7.29 Although farmers still had the option of using a valuer instead of the standard value card, it was intended that around 70% of farmers would opt for using the standard values. This expectation was not fulfilled.
- 2.7.30 The second SI came into force on 23 March to correct an omission in the listed categories of animals to which standard value had been accorded. The third SI came into force on 25 March and included a procedure for disputing valuations if the farmer did not agree with the valuer's assessment. The fourth SI came into force on 28 March and included additional categories of animals for inclusion in the schedule of standard values.
- 2.7.31 Finally, Order No. 5 on 30 July revoked standard values. In the event only 4% of valuations used standard values in whole or in part, but the card appeared to have had the effect of putting a floor to valuations.
- 2.7.32 Compensation paid for animals culled has cost £1,047 million.

Disposal Policy

Background

- 2.7.33 About 6.5 million animals were slaughtered and disposed of during the 2001 FMD outbreak, around 4 million as part of disease eradication, 2 million under the Livestock Welfare Disposal Scheme and half a million under the Light Lambs Scheme. These figures should be set in the context of the numbers of animals slaughtered for food in a normal year - 20 million sheep, 2.5 million cattle and 13 million pigs.

Disposal Hierarchy

- 2.7.34 The methods of disposal needed to reflect a number of different requirements. The prime veterinary concern with FMD carcasses is for rapid disposal to eliminate virus load. Movement of carcasses increases the risk of spreading infection. At the beginning of the outbreak the veterinary preference was therefore for disposal on-farm either by burial or burning. Both these methods were used extensively in the 1967-8 outbreak; on-farm burial is highlighted in the Northumberland Report and detailed instructions for pyre construction were included in the veterinary instructions for dealing with FMD.
- 2.7.35 However, in this outbreak, the importance of protecting the environment and concerns about the public health impact of some disposal methods meant that other options had to be investigated. The Environment Agency issued a hierarchy, agreed with MAFF, of disposal options on 6

March which placed rendering and incineration first, followed by licensed commercial landfill and mass burial. Burial and burning came low on the hierarchy because of the risks to the environment. All on-farm burn and burial sites needed ground water authorisations from the EA to comply with the Groundwater Regulations 1998 and needed also to comply with Article 3(2) of the Animal Waste Directive.

2.7.36 Moving the carcasses off site was not always easy. The location of rendering plants was not always suitable and bringing them into use required contractual arrangements and assurance that the methods used did not introduce risks of spreading the virus together with clear procedures and operational guidance to effect this.

2.7.37 As the epidemic grew, concerns about the perceived risks to human health from the disposal methods also developed. Smoke from pyres caused immediate annoyance to local people and raised worries over its effect on the old and asthma sufferers; carcasses left in rotting piles on farms because disposal was not keeping up with slaughter raised concerns over contamination of public and private water supplies. During April the Department of Health led work to review the disposal hierarchy further to reflect both environmental and public health concerns, encompassing also advice from the Spongiform Encephalopathy Advisory Committee (SEAC) on the way in which cattle over 5 years old should be disposed of to prevent any risk of BSE infection. The resulting hierarchy was published on 24 April 2001 and is, in summary, as follows:-

Rendering
↓
Incineration
↓
Licensed landfill
↓
Pyre burning
↓
Mass burial or on-farm burial

In all cases FMD carcasses were given priority for rendering and over 5 year old cattle had priority for rendering or commercial incineration over sheep or pigs which could be buried or landfilled. This hierarchy remained in place for the remainder of the outbreak. The Guidance from the Department of Health also set guidelines in relation to the distance that pyres should be from habitation.

Phases of Disposal Policy

20 February - 20 March 2001

- 2.7.38 Disposal of carcasses after 20 February was carried out in accordance with the existing veterinary guidance i.e. by cremation on open pyres or by on-farm burial provided that ground water authorisations had been given by the Environment Agency. This took into account the risk assessment of BSE risks from older cattle, although only smaller pyres were envisaged.
- 2.7.39 However, the environmental considerations emphasised the importance of finding off-farm disposal and meant that rendering plants were contracted as fast as could be achieved, taking into account the need to ensure biosecurity at the plants and to establish effective haulage arrangements with vehicles that were suitable for the purpose. Protocols for loading and leak testing lorries, emergency procedures during transport, and biosecure operating procedures for rendering plants were in final form by 14 March. These protocols were used virtually unchanged until the end of the outbreak. Plant was available from 9 March 2001 and by 29 March 6 rendering plants were in operation with site specific biosecurity measures giving a potential weekly disposal capacity of 15,000 tonnes. The “traffic master” established at this time with the RPA, by which disposal requests were prioritised and vehicles allocated to transport carcasses to offsite disposal remained in operation throughout the outbreak. Incineration plants were fully committed to the disposal of BSE infected cattle, Specified Risk Material or cattle destroyed under the Over Thirty Months Scheme.
- 2.7.40 However, from the beginning of March as the outbreak increased it became clear that the capacity for farm burial and burning, constrained by environmental regulation, but supplemented by the increasing rendering supply, was still failing to match numbers slaughtered. Mass burn sites, where carcasses from more than one farm were brought together for burning were established, but the smoke and smell made these very unpopular with local communities and attracted adverse publicity nationally and internationally.
- 2.7.41 This prompted action to identify mass burial sites and by early April, 7 sites had been identified across the country:- Ash Moor in Devon, Great Orton in Cumbria, Birkshaw Forest in Dumfries, Throckmorton in Worcester, Eppynt in Sennybridge, Wales, Widdrington in Northumberland, and Tow Law in Durham. The aim was to procure large sites at which multiple pits capable of holding between 10,000 and 60,000 carcasses could be engineered. All sites were granted ground water authorisations by the Environment Agency; discussions on

planning consents and other environmental matters have been held retrospectively.

20 March - 20 April - Peak of the Outbreak

2.7.42 During this period the number of infected premises per day accelerated from around 20 to a peak of 50 and then declined. Culling contiguous premises and following the 24/48 hour slaughter policy generated a huge number of carcasses - during April up to 500,000 carcasses were being disposed of weekly. The need for the mass burial sites was demonstrated and the pressure to advance their development and use was great.

2.7.43 At the same time the Environment Agency identified possible licensed commercial landfill sites in England and Wales which were suitable for the disposal of carcasses. In theory, landfill capacity could have absorbed comfortably all stock slaughtered both in the FMD outbreak and from the subsequent Livestock Welfare Disposal Scheme. However, few licensed landfill operators were prepared to accept FMD carcasses, and then, because of the potential BSE risk, only sheep and pigs. In addition, there was opposition from the local public, local authorities, MPs, pressure groups and farmers near the sites. DETR consulted on draft regulations, subsequently introduced for 6 months, to enable the Secretary of State to direct licensed landfill site operators to accept and dispose of carcasses. These powers were then extended for a further 6 months. However, worries over the local reaction to making such a direction, and the increasing availability of the mass burial sites meant that no directions were made.

2.7.44 The carcasses from the Livestock Welfare Disposal Scheme, and later the Light Lambs Scheme did, however, go to licensed landfill under the existing strict controls within which the sites are operated, and with the agreement of the licence holders.

2.7.45 During this period the pressure on disposals was most acute. Great Orton in Cumbria began operating at the end of March and was functioning effectively so that carcasses were being removed rapidly from farm premises. The need separately to identify cattle over 5 years for rendering, following SEAC's advice was being managed, although it made the logistics of farm collection difficult. The co-operation of the Freight Transport Association in providing vehicles for carcass transport was valuable. In Devon, the contiguous cull policy caused an upsurge in the number of carcasses, public reaction to large pyres increased and there were major disposal problems. Work was pushed ahead on preparing and engineering the site at Ash Moor and holding sites were

explored so that carcasses could be moved from farms to prevent any possible contamination of the water supplies and reduce the stress caused to the local residents.

2.7.46 High ground water levels in Devon made on-farm burn and burial difficult and the use of air curtain incinerators was explored. These were brought from the United States, where they are used to burn waste wood, and pressed into service. Although they cannot handle great volumes, they appeared to provide a “cleaner burn” than pyres and could be used where environmental considerations meant that ordinary on-farm disposal methods could not.

2.7.47 In the middle of April the use of all methods, including on-farm burning cleared the backlog and as the epidemic had not spread across Dartmoor, as had been feared, Ash Moor, which was not completed until early May, was not needed.

20 April - 30 September 2001

2.7.48 From 20 April the disposal operation was effectively keeping pace with the slaughtering. The pictures of burning carcasses however, had made a major impact on tourists at home and abroad and, following the Department of Health’s guidance on pyres issued on 24 April, the concerns about health risks, and an intervention from the Prime Minister, their use ended in England and Wales on 7 May. At the same time, Great Orton was closed for carcasses with work there then focusing on the continuing task of leachate removal and environmental restoration. Mass burial sites work most effectively when they can be rapidly filled and the pits capped off. With warmer weather and fewer carcasses local people became increasingly hostile to the sites and there was increasing pressure to limit their use. Rendering therefore became the main disposal route from July for the remaining months of the outbreak. Occasionally geographical position and small peaks of disease meant that the overspill from rendering went to mass burial at Tow Law, or the northern licensed landfill sites. However, local opposition and the view that sites should only accept “local” carcasses from the surrounding counties made the use of mass burial very difficult to sustain.

2.7.49 The mass burial sites also attracted challenge in relation to UK environmental law and EC Directives. Throughout the summer and autumn action was taken to manage their use so as to reduce public concerns about them, while retaining their possible use in case of recrudescence. Rendering plants were returned to normal use, with the last one returned in February 2002.

Imposition of Infected Areas and Movement Controls

2.7.50 A ban on livestock movements in an 8km radius around the first suspect premises was put in place on 19 February by the issuing of a Form C under the Foot and Mouth Disease Order 1983. FMD was confirmed on the evening of 20 February, and an Infected Area Order was put in place on 21 February. This covered an area of at least 10km radius around the Infected Premises. On 23 February, once it became apparent that the virus had been active in Northumberland since the beginning of February, the whole of Great Britain was designated a Controlled Area. This banned all movements of farmed livestock throughout Great Britain.

2.7.51 These Controlled Area movement controls were additional to those imposed in Infected Area Orders made under the FMD Order 1983, and in accordance with the provisions of Directive 85/511/EEC. Where any outbreak of FMD was confirmed, an Infected Area with a radius of at least 10km was established around the infected holding.

2.7.52 At a later stage in the epidemic, and in the light of experience of more extensive controls on animal movements around Settle, stricter biosecurity controls were introduced in certain areas:- the Penrith Spur; around Thirsk in North Yorkshire; and around Hexham in Northumberland. This was a major increase of effort to control disease and prevent spread because of particular concerns about possible disease spread in these areas. Within these Restricted Infected Areas (RIAs), there was:-

- a general ban on the movement of animals onto and off farms except under licence to slaughter for human consumption or to the Livestock Welfare Disposal Scheme;
- a requirement to cleanse and disinfect all vehicles before entering and when leaving farms;
- a requirement to license all movements of feed and milk and silage vehicles onto and off farms;
- a requirement that all milk tankers operating the RIAs be dedicated for use in that area and accompanied by an official to ensure that cleansing and disinfection requirements were met;

- the establishment of official cleansing and disinfection stations within the area;
- a requirement for all livestock farms to maintain footbaths at every exit to their premises;
- a requirement that all people moving onto and off farms leave clothing and footwear used when handling FMD susceptible livestock on the premises (unless the clothing and footwear were first thoroughly washed and disinfected).

There were regular patrols by local authority officials and the police to ensure that the above requirements were being complied with.

2.7.53 Animal movements were allowed generally subject to licence and in accordance with the terms and conditions of such licences. These were issued subject to veterinary risk assessments, location and the changing disease situation.

Movement to slaughter

2.7.54 An early priority was to allow movement for slaughter for human consumption. The risk of such movements from holdings in the Controlled Area outside Infected Areas was deemed to be small as long as the following conditions applied:-

- Movements had to be from a holding to a slaughterhouse with no multiple pick-ups; all animals that were sent to slaughter had to be slaughtered within 24 hours of arrival at the slaughterhouse and could not be returned to the holding of origin;
- Vehicles carrying stock had to be fully cleansed and disinfected before loading and after unloading before leaving the slaughterhouse;
- Only slaughterhouses which were approved by the Meat Hygiene Service acting on behalf of MAFF/DEFRA could be used;
- Movements had to be under licence from the local authority for the holding of origin and were subject to conditions (e.g. journeys to be direct).

2.7.55 Movements were accordingly allowed from holdings in the Controlled Area from 2 March. As the understanding of the epidemiology of the outbreak grew, it was possible gradually to allow more and different types of movements to slaughter to take place under licence. In particular, from 23 April, animals were allowed to move to slaughter from within an Infected Area to a slaughterhouse in the same Infected Area (unless the holding of origin was within a Protection Zone and from 3 May this was also allowed where 15 days had passed since the preliminary disinfection of the relevant Infected Place). This change also enabled arrangements to be introduced from 21 June whereby animals in farms in an Infected Area were able to move outside this area for slaughter as long as their farms of origin were not within 10 km of an infected premises that had been declared in the last 30 days.

2.7.56 Before animals from an infected premises could be allowed to move to slaughter and into the human food chain it was necessary to provide that it could be marketed on an equal basis to other meat in the GB. To this end a new round stamp for all meat produced in GB was introduced by MAFF with the co-operation of the meat chain. This stamp differentiated GB meat from that sold in other parts of the EU, but as exports were banned this did not matter. Most importantly it provided a more appropriate outlet for livestock from infected areas and reduced the need for the LWDS. It was widely welcomed.

Welfare movements

2.7.57 Additionally movements of animals under licence other than to slaughter for human consumption have been allowed as follows:-

- On 9 March, movements of animals under licence on welfare grounds were permitted across roads on the same holding and between local holdings under the same ownership. Initially these were for welfare reasons only but from the end of April, such movements could be for general husbandry and management purposes;
- On 19 March, movements of animals under licence over longer distances were permitted, subject in particular to prior official veterinary inspection, cleansing, disinfection and sealing of vehicles and official supervision of the journey;
- From 11 May, licensed movements of sheep to common grazings were allowed;

- From 23 May, movements of animals from premises under Form D restrictions were allowed;
- From 5 July, animals could be moved under licence from grazings used by several stock keepers to a suitable location to carry out essential husbandry procedures;
- Since the end of July, the Over Thirty Months Scheme has been re-opened for cattle.

2.7.58 In addition to the above, movements under the Livestock Welfare Disposal Scheme, a scheme set up to permit animals to be sent for disposal on the grounds of welfare, were also allowed, subject to prior official veterinary inspection

2.7.59 A new system of licensing movements by local authorities was introduced from 17 September for FMD free counties; 24 September for animals other than sheep in at risk or high risk counties and on 1 October for sheep in at risk and high risk counties. Movement restrictions have been further relaxed following the revocation of the Controlled Area on 11 February 2002. When the Autumn Movements Scheme was introduced it had been subject to considerable stakeholder input. It was complex and involved installing entirely new systems to be operated by LAs rather than DEFRA. Inevitably there were significant teething problems and considerable frustration in the first two or three weeks, but these were overcome due to the efforts by LA trading standards staff working with DEFRA personnel.

Categorisation of the country into 3 FMD risk areas

2.7.60 In permitting movements of animals for welfare reasons, , the overriding need to control disease had to be respected and for this purpose, the country was administratively divided into three types of area:-

- Provisionally free areas (PFAs) where there had never been an outbreak of FMD;
- At risk areas (ARAs) where there had been FMD outbreaks which had been stamped out and around which Infected Area restrictions had been lifted;
- Infected areas (IAs) where there had been FMD outbreaks and where Infected Area movement restrictions continued to apply pending completion of serological surveillance around outbreaks.

- 2.7.61 Movements under official control were permitted from PFAs to ARAs to IAs, i.e. from areas of low to high FMD risk. Movements in the reverse direction were not permitted until 21 June 2001 when limited movements of cattle and pigs were allowed from ARAs to PFAs on condition that the animals being moved were subject to prior official veterinary examination and that they were quarantined on the holding of destination for 21 days.
- 2.7.62 When the revised animal movement licensing system came into effect in September, categorisation of FMD status was based on local authority areas. Classification of counties (including unitary authorities and metropolitan districts) was based on the following:-

FMD Free Counties

- No outbreaks of FMD for 3 months, and serological surveillance in 3km zone and 3-10km zone around individual outbreaks complete and seropositive sheep/flocks destroyed, and all at risk flocks (farms under Form D investigations and farms known to have received sheep between 1 - 23 February 2001) resolved, i.e. dead or tested negative.

FMD At Risk Counties

- No outbreaks in the county for the past 30 days and entirely outside an existing Infected Area/Restricted Infected Area, and serological surveillance in 3 km zone completed, and serological surveillance in 3-10km zone around outbreaks not complete or at risk flocks (farms under Form D investigations and farms known to have received sheep between 1-23 February 2001) still to be resolved, i.e. dead or tested negative.

FMD High Risk Counties

- Outbreaks of FMD in the past 30 days, or surveillance in 3 km zone around outbreaks not completed, and surveillance in the 3-10 km zone not completed, and flocks at risk of FMD (Form D/received sheep 1-23 Feb 2001) not resolved.

- 2.7.63 In allocating areas to any of the above categories, the Chief Veterinary Officer took into account the number of sheep in the county concerned, the previous weight of FMD infection, and the amount of serological surveillance completed. Additional surveillance over and above that carried out in the 3-10 km zones around outbreaks was undertaken in areas with high sheep populations and a history of heavy infection in order to be confident about the disease status of flocks in those areas.

2.7.64 Classification status was reviewed on a weekly basis until all counties obtained free status. The last county to be classified as free was Northumberland, from 15 January.

2.7.65 A total of 251,901 veterinary inspections of stock were made in association with movements for welfare purposes, in addition to those which were made within infected areas. No cases of FMD were identified as a result of these official pre-movement inspections.

Livestock Welfare Disposal Scheme (LWDS)

2.7.66 The LWDS was set up to provide an outlet for animals suffering welfare problems as a result of being unable to move because of FMD restrictions. Such problems were most often due to lack of food where land was grazed out and/or overstocked, or, in the case of pigs, due to overcrowding. Livestock farmers were offered a payment for their animals that was below the estimated market rate of the animals, to reinforce the status of this route as a last resort. It was not intended as a compensation scheme for farmers suffering hardship as a consequence of the FMD outbreak. Neither was it intended as an alternative market. To this end, a veterinary certificate was required before animals could be entered into the scheme, to certify the existence of an immediate or imminent welfare problem. A fast-track system was made available for the most pressing welfare cases through the RSPCA or local veterinary surgeons.

2.7.67 The scheme was set up in March and was operated on behalf of DEFRA and the Devolved Administrations by the Intervention Board. The sheer volume of applications at the beginning of the scheme was overwhelming and delays to slaughter led to increased welfare problems for some farmers. But this pressure was eased by moves to reduce Infected Areas and changes to movement licensing systems.

2.7.68 On 3 September, the Light Lambs Scheme was introduced to cover 'light' lambs, traditionally exported to Mediterranean countries, which could not be marketed due to the export ban and continuing movement restrictions. Its premise was that such lambs would, by definition, face a welfare problem during the winter because farmers would have no facilities to keep and feed them, and so no special certification was required.

2.7.69 The initial rates set for LWDS probably led to excessive diversion into the scheme and had to be adjusted. Payment rates were revised downwards on 30 April, 30 July and 29 October and the scheme was closed on 31 December. In total about 2 million animals were

slaughtered and under the LWDS and another 500,000 lambs under the Light Lamb Scheme. The total claims paid under the LWDS is about £206m and under the Light Lambs Scheme is about £5m. The total cost of the LWDS was about £400 m.

Lifting Infected Areas

2.7.70 Intensive surveillance of all susceptible livestock in the 3km Protection Zone around Infected Premises was completed before the Infected Area was lifted. This was in line with what had been required of other Member States under Commission Decision 2001/295/EC. Surveillance included serological testing of all sheep and goat flocks/herds in the 3km zone. Serology did not begin until at least 21 days after animals were slaughtered and preliminary cleaning and disinfection had taken place. The IA cannot be lifted for at least 30 days after slaughter of the infected animals.

Cleansing and Disinfection

2.7.71 Preliminary cleansing and disinfection is carried out immediately after slaughter and disposal on all premises known, or believed to be contaminated with the FMD virus in order to minimise the risk of spread of the virus to neighbouring farms. This work is carried out by the farmer, by contractors or by MAFF/DEFRA staff. The average cost per farm is about £700.

2.7.72 24 hours after this stage has been completed, secondary C&D can begin. Again its purpose is to reduce the risk of recrudescence. This work is undertaken either by farmers or commercial contractors. In general DEFRA pays the costs of secondary C&D, but this is dependent on farms being in a reasonable state of cleanliness and repair, there being no health and safety implications for those concerned, and the costs incurred being proportionate to the individual farm situation.

2.7.73 At the end of July, in order to ensure that the funding of C&D arrangements was giving the taxpayer value for money, DEFRA undertook a review of the cost of secondary C&D. This was instigated after initial bills received in England appeared to show the average cost per farm at about £100,000. Although the review showed that the average cost per farm was much less, at around £36,000, the opportunity was taken to tighten up the contractual procedures and introduce fixed price contracts in all cases. Some existing contracts were cancelled and others tightened; farmers were given the first opportunity to tender contracts to clean their own farms; guidance on standards of cleansing was re-assessed and maximum standards were set to avoid payment for

‘betterment’ of farm buildings. DEFRA reserved the right to withhold payment where biosecurity factors were shown to have led to disease entering the farm. C&D is now almost complete on all but 19 premises.

Serology Strategy

2.7.74 Serology is the process of examining blood samples for the presence of antibodies. For FMD, detectable levels of antibody may not occur for five to ten days after the appearance of clinical signs. Two types of serological tests were used in the FMD outbreak:-

- The ELISA test which gives rapid results; but which can be inconclusive in some cases; and
- a Virus Neutralisation Test (VNT) which takes more time but gives definitive results. This was used to confirm inconclusive ELISA tests results.

2.7.75 The main uses for serology were diagnosis of the disease, epidemiology, lifting of Protection Zone restrictions (3km radius from an Infected Premises), Surveillance Zone testing (3-10km radius around an Infected Premises) and pre-movement testing for Autumn Movements in At Risk and High Risk counties. Other uses included testing rare breeds of sheep or hefted sheep to provide exemptions from contiguous culls and testing animals following re-stocking. In practice, use of serology focussed principally on the lifting of Protection Zones and the completion of testing in Surveillance Zones

2.7.76 By January 2002, when all counties had been declared free, over 3 million blood samples had been taken. Some blood testing is still being carried out on farms in relation to re-stocking.

2.7.77 Laboratory capacity was a limiting factor at the outset of the FMD epidemic. Capacity stood at 400 tests a week and was gradually increased until it reached a peak in November of about 200,000 tests a week. The laboratory facilities needed to carry out the testing are highly specialised and a very high level of biosecurity is needed. IAH Pirbright is the national, European and OIE reference laboratory and is the only laboratory in the UK that has facilities for diseased stock. It took time to increase the testing capacity by bringing other laboratories to the required standard.

Lab	Capacity (per week)	Available from:-
IAH, Pirbright	40,000 ELISA + VNTs	Originally 400/week but

		increased to 40,000/week by May/June
CAMR, Porton Down	20,000 (ELISA only)	Mid May
VLA, Penrith	40,000 (ELISA only)	July
VLA, Shrewsbury	40,000 (Elisa only)	August
VLA, Luddington	40,000 (Elisa only)	Sept
AHT, Newmarket	20,000 (ELISA only)	Mid November

Restocking

2.7.78 The restocking of herds and flocks affected by FMD and the replenishment of other herds needs to be carefully planned. Controlling the risk of introducing disease is a top priority. To this end, certain rules are applied to the restocking process. They are as follows:-

- Full and final cleansing and disinfection of the farm must have taken place and a period of 21 days allowed to elapse;
- Movements of stock onto the farm are licensed by DEFRA or SEERAD;
- The numbers of livestock permitted for initial restocking must be set out in the premises restocking plan, which must be approved by the Divisional Veterinary Manager;
- Depending on the origin of sheep, testing of the flock of origin and all the sheep to be moved may be required. This gives valuable surveillance data on the prevalence of disease in the national flock;
- Animals are inspected regularly for four weeks. Sheep and goats are blood tested after 28 days. If all is clear, restrictions are lifted, following a final veterinary inspection.

2.7.79 Alternatively, if the farmer does not wish to restock at once, restrictions are lifted four months after the full and final C & D, subject to a final inspection.

2.7.80 Two booklets – “*Golden Rules for a Healthy Herd*” and “*Golden Rules for a Healthy Flock*”, both aimed at raising the awareness of the risk of re-introducing or spreading livestock diseases when restocking, were launched on 30 October 2001.

2.7.81 The issues around restocking go much wider than the rules designed to prevent a recrudescence of FMD on the holding. Other issues include how to ensure that the stock brought in is free from other diseases and that farm business and environmental advice is available so that farmers can consider the business options open to them.

Welfare and Support of Farmers

2.7.82 DEFRA has worked with the Department of Health throughout the FMD outbreak on a range of initiatives offering practical and emotional support and guidance to help alleviate stress in rural areas. It has continued to provide financial backing for the Rural Stress Action Plan (RSAP) established during 2000 in response to concern about the consequences for the mental well being of farmers and their families of the severe economic downturn in agriculture. The RSAP Group is formed of a partnership between Government, the voluntary mental health sector (including the Samaritans) and national farming organisations. It aims to deliver support to those in distress.

2.7.83 The Government has also continued to provide funding for the Rural Stress Information Network (RSIN) to establish a network of support available to people in rural communities who are suffering from stress. The RSIN was launched on 4 December 1996 and includes professional health care staff and voluntary organisations with relevant expertise (Samaritans, MIND etc) together with legal, financial and business support. The RSIN also assists in the development of local stress support groups, providing information about the causes and extent of rural stress and advice on measures available to help alleviate the problem.

2.7.84 The Government set up the 'Charity Match Funding Scheme', administered by the Countryside Agency March 2001 to implement its commitment to match, pound for pound, donations made by the public to voluntary organisations working to alleviate rural stress due to the FMD outbreak.

SECTION 8

COMMUNICATIONS SYSTEMS

2.8.1 Communication has been of utmost importance in dealing with this epidemic, particularly because of the speed at which the disease developed and information had to be relayed both within DEFRA and to keep farmers, the public and the media informed. This section therefore deals both with external and internal communications.

Website

2.8.2 The most direct source of information on the outbreak for farmers, the public and the media has been the FMD pages on MAFFWEB and later DEFRAWEB. This was initially created on 20 February; the information carried developed over time to include:-

- News and information on the fight against FMD;
- A full list of confirmed cases of FMD, which was constantly up-dated in real time;
- Full details, including maps and an interactive mapping facility of Infected Areas;
- Full details of disease control measures and restrictions;
- Advice to farmers;
- Advice on rural activities;
- Links to relevant websites.

In its peak month of April, the FMD website received over 9 million hits of which 48% were outside normal work hours.

2.8.3 Other key websites for information on rural activities during the outbreak were:-

- **Open Britain** (www.openbritain.gov.uk) which contained detailed tourist information on holiday locations and attractions, as well as the latest news on how Foot and Mouth restrictions are affecting countryside activities.
- The **Countryside Agency** (www.countryside.gov.uk) website which has excellent information on public access to rights of way, including details on the accessibility of country parks and national trails. It also contained links to local authorities' latest information on countryside access.
- The **Number Ten website** (www.pm.gov.uk) which had a straightforward list of county by county links which take you straight to local information on FMD restrictions.

Media

- 2.8.4 In addition to the mass of information on the website, the media was kept informed of the progress of the epidemic by briefing. The MAFF Communications Directorate was strengthened. During the first month of the outbreak there were daily Ministerial press briefings by MAFF Ministers and frequent press briefings on particular topics such as the contiguous cull policy and vaccination by the CVO and CSA. During March the News Co-ordination Centre in the Cabinet Office was also mobilised and provided daily briefing on all aspects of the epidemic which was used not only by the press, but as a very useful source of material for Embassies abroad. The Central Office of Information Regional staff were brought into the DCCs and contributed significantly to ensuring that local issues were fully addressed and explained to the media.

Helplines

- 2.8.5 Helplines were set up to provide information to the public and particularly those directly affected by FMD to cover not only the DEFRA licensing system, but also advice on local business support and the modifications in the tax system. All were well used:- the national FMD helpline established by MAFF on 22 February, was rapidly expanded to cover 24 hours a day, 7 days a week and at the peak of the epidemic was taking 10,000 calls a day. Problems caused by delays in providing information to Helplines were addressed as quickly as possible. Specialised helplines, with, for example, information on licensing were established and local offices ran general enquiry points. Information on the possible impact of FMD on human health was available on NHS Direct.

Stakeholder meetings

- 2.8.6 Direct contact with stakeholders which ensured the two way flow of information was secured through a series of meetings held by a range of Ministers. On 23 February, the first national stakeholders meeting was held by MAFF in London for all those directly involved in the epidemic:- representatives from the farming and food industry; the veterinary organisations; hauliers and local authorities. These meetings were held weekly in the first months and were chaired by Ministers. Interested organisations attended and were able to be briefed on developments and to offer their views on issues as they arose. Regional stakeholders meetings were held by all RODs across their areas to ensure that those most affected could be kept informed.

- 2.8.7 The Rural Task Force, which also met weekly until Easter, brought together major non-farming rural stakeholders and acted as a channel of communication to the broader stakeholder community. In addition, and following the Annual Tourism Summit attended by Ministers from DCMS, MAFF, DETR and DTI, four meetings of a tourism stakeholder group were held, chaired by DCMS Ministers.

Direct mailings to farmers

- 2.8.8 Important information for farmers was sent to them direct. During the epidemic MAFF/DEFRA headquarters made 16 direct mailings to farmers. The distribution was generally to all livestock farmers but some were more directly targeted (e.g. to sheep farmers or livestock farmers in Cumbria). They provided information on a range of subjects including fact sheets on recognition of the disease and welfare of animals to explanations of particular policy issues such as the refinements to the contiguous cull. On 6 July, all livestock farmers were sent a video and leaflet on biosecurity. Many DCCs also sent information directly to farmers; the Exeter DCC for example sent over 30 information sheets to Devon farmers.

Parliament

- 2.8.9 The Minister of Agriculture made regular statements to Parliament at the height of the epidemic. Ministers and officials appeared before Parliamentary Committees such as the Environment, Food and Rural Affairs Select Committee of the House of Commons. All MPs were told when FMD was confirmed on premises belonging to one of their constituents; over 1000 Parliamentary Questions were answered with much supporting information being placed in the House Libraries, and information was given directly to MPs by DCCs because of the need for speed. A dedicated helpline was set up for MPs to deal with constituency queries.

Communications within DEFRA

- 2.8.10 The quality of internal communication depends primarily upon the management and liaison structures, as well as the importance that is attached to ensuring that communication takes place. As resources were increased during the epidemic so co-ordination and communication improved.
- 2.8.11 The JCC, once established with responsibility for information flows, sought to enhance the communications between the centre and the

DCCs by acting as a communication hub, by requiring daily sitreps on all issues from the DCCs and by organising daily responses from operations and policy HQ.

- 2.8.12 The need to ensure that a large regional organisation was kept fully briefed so that they could apply policies in a consistent fashion meant that many instructions were sent out by email from headquarters in London. Recipients - DVMs and RODs - were responsible for ensuring that their staff understood the instructions and that TVIs and field teams were briefed when they came into the office. The size and complexity of some of the instructions, dealing as they did with important issues that needed to be passed on clearly to farmers or with complicated licensing arrangements which required new processing arrangements sometimes made this task very difficult and could leave the official dealing directly with the farmer feeling exposed.
- 2.8.13 The most important means of gathering, analysing and processing data was the dedicated FMD Disease Control System (DCS). This was rolled out on 6 March 2001 and replaced, for FMD purposes the permanent Vetnet IT system which was then used only to provide a tracing facility during the outbreak. The DCS was intended to provide a simple and consistent way to record data from all Infected Premises and other premises involved in the outbreak for local DCCs. The DCS was available both locally and to the DECC in Page Street enabling data to be taken off the system centrally and used as the basis for all the management information and data on the disease that has been put on the DEFRA website and provided to the public. As with any system used by a great number of newly recruited staff to deal with developing issues there have been problems in ensuring that all information is entered fully and in a timely fashion and that the system can provide the management information required. A review and validation exercise is now under way.
- 2.8.14 The DCS was developed and enhanced during the epidemic and was eventually used to support the Animal Movement Licensing System used by local authorities for the autumn movements.