REPORT

Rome,
Italy,
27-30 April
1993

European Commission for the Control of Foot-and-Mouth Disease

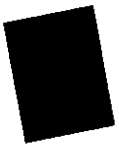
Thirtieth session

Food and Agriculture Organization
of the United Nations

SUMMARY

The Thirtieth Session of the European Commission for the Control of Foot-and-Mouth Disease met in Rome from 27-30 April 1993. Delegates from 25 of the 28 Member Countries attended, together with observers from non-member countries and international organizations (Appendix 11). The Session considered the future of the Commission, agreed that it should continue in being under the existing constitutional arrangements for at least two years, and approved new aims and additional objectives. Recommendations on the formulation of national contingency plans, on security standards for FMD laboratories, and on minimum conditions for the import into Europe of bovine animals and products were adopted. Concern was expressed that the origin of the infection reintroduced into Europe in 1993 had not been identified, and Italy was complimented on its effective response to the outbreaks.

Meeting Report (AGA-701)
AGA: EUFMD



REPORT

of the

THIRTIETH SESSION

of the

EUROPEAN COMMISSION FOR THE CONTROL OF FOOT-AND-MOUTH DISEASE

Rome, 27-30 April 1993

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
Rome 1993

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CONCLUSIONS AND RECOMMENDATIONS

The **conclusions** and **recommendations** of the Session are as follows:

- Europe now has a harmonized policy in respect of FMD and the response to the Italian outbreak has been a good test of emergency policies;

- the importance of a system for quick submission of samples for examination by a

laboratory was stressed;

- information about strategic reserves of vaccine, although correct at a particular point of time, needed to be regularly updated, particularly in respect of strategic reserves;

- the present absolute block on the imports into the European Community of animals and animal products from eastern Europe was most undesirable, but in future there had to be no doubt about either the animals being imported or the documents which accompanied them;

- the recommendations relating to

i) FMD national contingency plans, including actions in non- vaccination countries,
ii) security standards for FMD laboratories, and
iii) minimum conditions for the importation into Europe of live animals, fresh meat and offal of the bovine species

were adopted unanimously

- the Commission adopted the recommendations made by the Executive Committee at its Fifty-fifth Session held in Toledo, 16-18 February 1993, that the policy of non-vaccination should continue in the Thrace area, and that sero-surveillance should be carried out on a regular basis in collaboration with the Turkish authorities in order to assess whether virus was circulating in that area;

- Delegates agreed unanimously that the Commission should continue in being for a period of two years in the first place after which the position would be reviewed, and that a new Technical Secretary should be recruited and appointed to work full-time at P-4 level on a two year contract. The recommendations of the Executive Committee were therefore amended to read as follows:

i) The Commission should continue in being, operating under Art. XIV of the FA0 Constitution;

ii) The future aims of the Commission should be

a) to monitor the FMD situation in the surrounding area and worldwide, and to disseminate the information obtained;
b) to promote appropriate areas of research; and,
c) to provide a forum to coordinate the prevention and control of FMD in Member Countries.

iii) The new objectives of the Commission would be

a) to establish effective surveillance and monitoring of the FMD situation in collaboration with surrounding countries (a more active role than the information gathering and dissemination exercise currently performed by OIE);

b) to encourage the development and implementation of policies and strategies to ensure a prompt and effective response to outbreaks of FMD in these countries. Any action proposed outside the territories of the Member Countries would have to be separately funded.

These objectives would be additional to those which already existed.

iv) Meetings of the General Session should continue to be held biennially in Rome, but should in future be as short as possible consistent with the agenda to be discussed. It was anticipated that under normal circumstances a maximum of three days would suffice, and that reports should be as brief and concise as possible.

v) The Executive Committee should continue to have eight members and to contain members from different areas.

vi) The Research Group should continue to meet regularly, but costs should be minimized by arranging joint meetings with the EC Scientific Veterinary Committee, and by the costs of those attending being paid by national authorities, other than in exceptional circumstances. This would mean that biennial open meetings would be arranged by FA0 and chaired by the Chairman of the Research Group, and that other ad hoc meetings would be organized and chaired by the Chairman of the EC Scientific Veterinary Committee, with the Commission of the European Community being responsible for inviting outsiders.

vii) The services of the Administrative Assistant should be retained.

viii) A Secretary should be recruited by FA0, in accordance with Art. XII of the Constitution and appointed by the Director-General with the approval of the Executive Committee for a two-year period at P-4 level.

- it was agreed that the Executive Committee should be given a mandate to recommend an increase in the scale of contributions in an emergency;

- Dr. K.C. Meldrum, Chief Veterinary Officer, (UK) was elected Chairman of the Commission; his term of office is for two years.

- The Thirty-first Session of the Commission will be held in Rome in spring 1995, the dates to be agreed by the Executive Committee.

1. Introduction

1.1 The Thirtieth Session of the European Commission for the Control of Foot-and-Mouth Disease was held in Rome from 27 to 30 April 1993.

1.2 The Chairman, Dr. Stougaard (Denmark) welcomed delegates and observers to the meeting and invited the Assistant Director General of the Agriculture Department, Dr. H. de Haen to open the meeting.

1.3 Dr. de Haen welcomed all delegates, experts and observers, particularly those participating for the first time in a meeting of the Commission.

1.4 He said that when the establishment of the Commission had been agreed in 1953, FAO's objective was to implement a policy of regional approach to a problem of worldwide importance. FAO realized that cooperation between countries would be essential for the success of any programme and that a Commission would be the most suitable forum to facilitate the elaboration of a common policy for disease prevention and control in Europe. He emphasized the value of FAO's ability to work across country borders in a way that few other organizations can do. The European experience in disease control, and the development of technology and expertise had subsequently been transferred to developing countries by European experts through FAO fellowships for training in all aspects of FMD diagnosis, control and vaccine production techniques. A special feature of the Commission's work had been the active collaboration it had established with so many institutions, not least the World Reference Laboratory at Pirbright, and the Research Group had been a major promoter of technical developments. Of particular note had been the Commission's participation in and invaluable contribution to FAO programmes in foot-and-mouth disease control and vaccine production in areas throughout the European continent.

1.5 Dr. de Haen referred to the decision by the European community, and subsequently adopted throughout Europe, to discontinue vaccination against foot-and-mouth disease. It was gratifying that such a policy had been harmonised in the whole of Europe, but continuing vigilance was essential in order to consolidate the favourable disease situation which had been achieved. He hoped that recent outbreaks in Italy would not be repeated.

1.6 The history of foot-and-mouth disease had demonstrated the importance of a regional, or continental, approach. National prophylactic and control programmes had to take into account the epidemiological situation in the neighbouring countries and regions. The reappearance of FMD in Italy in 1993, in animals imported from or through southeastern Europe, was a tangible demonstration of the need for continuous vigilance against a disease which was still present in areas surrounding Europe. The lack of accurate information on the disease situation in the Middle East area made the maintenance and proper implementation of the strategic vaccination area in Turkey of even greater importance for the whole of Europe. It was gratifying that the Turkish Thrace area had been declared disease free and the buffer zone had been relocated to a strategic vaccination area in western Anatolia in Turkey.

1.7 In concluding Dr. de Haen acknowledged, on behalf of FAO, that the results achieved by the Commission during 40 years of activities were an excellent example of a regional approach to the control and eradication of a livestock disease, and stated that FAO assistance

would continue to be available. The knowledge gained by the Commission from its experience of FMD control and eradication in Europe should be taken as a model for the establishment of similar Commissions in other regions, and also for the implementation of campaigns against other highly infectious diseases. The Commission had achieved many of the objectives for which it was established in 1954 and now faced the challenge of consolidating those gains and planning its own future. He was confident that relevant items on the Agenda would be treated with due consideration, and that an agreement on whether, and if so how, the Commission would continue would be reached. He reiterated FAO's continued support and commitment to the programme of the European Commission for the Control of Foot-and-Mouth Disease and to the control and eventual eradication of this disease in other parts of the world, commenting that we were linked by trade with even the remotest parts. He wished the Commission every success in their deliberations and declared the Session open.

1.8 Dr. Cunningham, Director, Animal Production and Health Division, then added his own welcome. He emphasized the partnership between FAO (a worldwide organization) and the Commission (a regional body), stressing the advantages for both sides. Both were funded by the same Governments, and FAO supported the Commission to the extent of some 25% of the budget. He wished to reinforce these points of partnership.

1.9 There had been two significant events since the last Session in 1991. The first was the discontinuation of vaccination in all member countries, the second the reappearance of foot-and-mouth disease in Europe in 1993. It was pertinent that infection had been reimported, and the risks of this being repeated would remain whilst there was a tenfold difference in the value of animals between the east and the west of Europe.

1.10 Dr. Cunningham concluded by reminding delegates of recent and forthcoming changes in the personnel of his Division, including the imminent retirement of Dr. Stouraitis, and concluded by referring to discussion which had taken place during the preceding 12 months about the future of the Commission. Although there had been no absolute meeting of minds he hoped that during the following two days there would be a full, frank and objective discussion of the problems.

2. Adoption of the Agenda

2.1 The Agenda was agreed as presented, but with the addition of an item on the foot-and-mouth disease situation in Europe in 1993.

Agenda

1. Adoption of Agenda

2. Report on the Commission's activities during 1992-92

3. FMD situation in Europe and in other regions during 1991-92

4. (a) FMD prophylaxis in Europe
   (b) Vaccination programme

5. FMD situation in Europe during 1993

6. (a) Activities of the Research Group
   (b) Review of Commission recommendations:-

   (i) -National Contingency Plans
   (ii) -Security Standards for FMD Laboratories
   (iii) -Minimum Conditions for the Importation into Europe of Live Animals, Fresh Meat and Offal of the Bovine Species

7. Second phase of the buffer zone project in Turkey

8. Future of the Commission

9. Financial report
   TF904200
   -breakdown expenditure 1991/1992
   -proposed budget 1993

10. Election of Chairman, Vice-Chairmen and members of the Executive Committee - Members of the Research Group

11. Adoption of draft Report of the Session

12. Any other business

3. Report of the Executive Committee on the Commission's activities during 1991 and 1992

3.1 The Secretary, Dr. Stouraitis, introduced the report covering the period since the Twenty-ninth Session 1991. The full report is given at Appendix 1. He was gratified by the fact that Europe now has a harmonized policy in respect of foot-and-mouth disease, and that the response to the Italian outbreak had been a good test of emergency policies. The Chairman complimented the Research Group on their work and in particular on the excellent set of recommendations which would be discussed later during the meeting.

4. FMD situation in Europe and other regions - 1991-1992

4.1 The Secretary introduced the report which is included as Appendix 2. He commented on the paucity of information from certain areas, and the lack of vaccine production capacity in some parts of the world.

4.2 The Chairman reminded the meeting that FAO had decided to set up regional groups using the European Commission as a successful model. There was no doubt that local

initiative with central help would be the way forward. One area which posed a potential threat to Europe was North Africa, and he invited Dr. Donaldson to describe the EC funded project linking the Pirbright laboratory and one of the North African countries. Dr. Donaldson, supported by the observer of Morocco, said that the project involved technology transfer and cooperation with staff of the Moroccan veterinary service in surveillance to establish the effectiveness of vaccination coverage and whether virus was circulating. Two Moroccans were at present at the Pirbright Institute where they will be testing large numbers of blood samples which had already been collected. The observer from Morocco added that 70% of sheep had been vaccinated with homologous vaccine during the previous two years, and 70% of cattle had been vaccinated using bivalent 0 A_5 vaccine.

4.3 Dr. Donaldson (World Reference Laboratory) updated the figures for outbreaks in Turkey in 1991 and 1992, but commented that too few samples had been received in 1993 to enable any judgment on the situation there. He was supported by the delegate of Italy, who also commented on the lack of information from what was formerly the USSR. Information was needed because of the trade links which had existed. The observer from OIE also supported the comments about the former USSR and pointed out that, contrary to what was stated in the Report, knowledge about the situation in eastern Europe was neither clear nor reliable. Following further discussion it was agreed that there was an urgent need for accurate information about the situation in the former USSR, and the Chairman hoped that the opportunity would be taken to make contact at the forthcoming OIE meeting in Paris. The delegates of Finland and Norway said that they had been informed by the regional authorities that vaccination was not taking place in the north of the Russian Federation adjoining their countries, or in Estonia or the Baltic States. The delegate of Norway also informed the meeting about the bilateral contacts between the Norwegian and Russian veterinary authorities in this area. Further information was provided by Dr. Chillaud (OIE) who summarised incomplete information received in response to an OIE questionnaire. Georgia had admitted to an outbreak of FMD in 1992 (in August), but there had been no outbreaks in the Baltic States, Belarus, Moldova, Kyrgyzstan or Uzbekistan. Replies to another questionnaire about vaccination were still being received.

4.4 The Delegate of Poland stated that there had been no outbreak of foot-and-mouth disease confirmed there in 20 years, that no vaccine had been produced for the last eight years, and that vaccination had been banned on 1 June 1991 in order to comply with EC trade requirements.

4.5 The Observer from the Czech Republic, speaking also for the Observer from the Slovak Republic, said that vaccination of pigs in the former Czechoslovakia had been stopped on 1 July 1991, and of cattle on 1 September 1991. The only vaccine producing company, which had been situated in what was now the Czech Republic, had stopped production in 1991. The last case of FMD in the former Czechoslovakia had occurred in 1974.

4.6 Dr. Donaldson (World Reference Laboratory) concluded the discussion by pointing out that Botswana had been free of disease since 1978, and that there had been no recent outbreaks in Zimbabwe, although the situation there was still being monitored by virological surveillance for carriers. The 1991 outbreak in that country was thought to be linked directly with the 1989 outbreaks, infection having persisted in carrier animals. There was evidence of cattle remaining as carriers for three years; it was impossible to say whether this very long

term carrier state was linked to the South African sero types, although it was tempting to speculate that this might be so. The African buffalo was known to carry FMD virus for up to five years.

4.7 The Observer from the Russian Federation said that his country had been free from foot-and-mouth disease for the last few years, although more than 100 million doses of inactivated vaccine were produced for use in the Federation and in those independent neighbouring countries which had once been part of the USSR. Within the Russian Federation cattle, large ruminants and sheep were routinely vaccinated with bivalent A and O vaccine in areas bordering the Caucasus, Central Asia and Kazakhstan. No vaccination was carried out in the western border areas. He did not have accurate information about the situation in countries which had formerly been part of the USSR, but felt that contacts with them were reasonable since the Federation still provided the diagnostic facilities and any vaccines used. The Russian Federation did not export live cattle, but the possibility of some unauthorized trade could not be ruled out. Because of economic circumstances the amount of vaccination had been reduced, and there had been no vaccination at all in the western areas of the Federation in the last two years. However, vaccination of ruminants was mandatory in southern border areas, using bivalent A22 and O vaccine twice a year in the spring and autumn. Following an appeal from the Chairman for samples to be sent to the World Reference Laboratory, Dr. Donaldson said that a collaborative programme between Pirbright and the Vladimir Institute was about to commence, and that vaccine strains had already been received at Pirbright from that Institute. No field strains had been received because no outbreaks had been reported in the Russian Federation.

4.8 The Delegate of Romania said his country had been free of foot-and-mouth disease since 1973. A national vaccination programme had been carried out between 1973 and 1984, but between 1984 and 1991 vaccination was restricted to animals for export, particularly to Arabian countries, and around airports and near borders. Since 1991 there had been no vaccination at all, and in 1993 the production of vaccine was stopped. A surveillance programme had started on 1 March 1993, the intention being to detect antibodies in cattle and sheep and to establish the antibody status of the country. A decision had been taken in February 1993 to destroy the remaining stocks of vaccine, whose shelf-life would have expired in June 1993 in any case. Until destruction was carried out the vaccine stocks, all of O1 strain, would be held at the Pasteur Institute under official control. Romania would then have no emergency stocks, but did have plans for access to vaccine in an emergency. No animals were imported into the country for slaughter, or for breeding in 1992 or 1993. In reply to a question from the Delegate of Italy, he said that vaccine was produced in a national institute, that the decision to destroy existing stocks had been taken partly because the unexpired shelf-life was short, and that distribution was controlled by the state organization responsible for vaccines and drugs.

5. FMD prophylaxis and vaccination in Europe 1991-1992

5.1 Dr. Stouraitis presented the report which is included at Appendix 3. He reminded delegates of the problems which existed in controlling trade, and that both importing and exporting countries have responsibilities.

5.2 The Delegate of Greece asked whether the Commission intended to promote EC type contingency plans in neighbouring countries. In response it was pointed out that neither the Commission nor the European Community can force other countries to draw up contingency plans, but that the Commission certainly advocated the value of following the guidance given in the recommendation drawn up by the Research Committee. In particular, the importance of a system for quick submission of samples for examination by a laboratory was stressed.

5.3 The Delegate of the Netherlands commented that information about strategic reserves of vaccine, although correct at a particular point of time, needed to be regularly updated, particularly in respect of strategic reserves. Some of the information given was inadequate, and lacking in detail. It had to be remembered that the shelf life of ready to use vaccine was limited. The Delegate of France, too, emphasized the need for more precision about details of vaccine reserves. Stocks of concentrated antigen needed to be distinguished from vaccine which was ready to use. How long would it take to reconstitute vaccine from antigen? His comments were supported by the Delegate from Italy, who said that if vaccine was not available for use quickly it would not be much use. In response Dr. Donaldson said that the International Vaccine Bank had carried out trials and was satisfied that it could reconstitute and reformulate from stored antigen at the rate of some 200,000 doses a day, and that supplies could be in the field within three days - and probably less.

6. FMD situation in Europe 1993

6.1 At the invitation of the Chairman the Delegate of Italy presented a detailed description of the outbreak of FMD which had occurred in Italy in 1993. The report is included at Appendix 4. He emphasized that the costs of the outbreak were not yet calculable but suggested that they may be as much as ten times the cost of compensation. He acknowledged the help which had been received from the European Community, from OIE and from the Commission. Tracing of animals had proved difficult and some certificates had given incorrect information about the origin of the animals. He also commented that vaccine of OAC type produced in Romania and nearing the end of its shelf life, had been found in Italy when carrying out investigations into the latter of the two outbreaks involving buffalo. This vaccine must have been smuggled into Italy.

6.2 The Secretary regretted that the origin of the outbreak was still unknown; there was speculation about origin of animals and the routes of movement, but still no firm information. In present circumstances it was unacceptable to have such an epizootic occur without a known origin.

6.3 Dr. Donaldson (World Reference Laboratory) gave information about the characteristics of the Italian isolates. Both introductions were typical O1 Middle East strains, and so closely related that they probably had a common origin. This suggested that disease was active in the area from which the animals had come. The isolates were not closely related to recent Turkish strains examined at Pirbright, but since the number of samples received recently from Turkey was insufficient to give a full picture this comment had to be qualified. The isolates seemed to be linked to strains which had been circulating in the Middle East in 1991 and 1992.

6.4 The delegate from the United Kingdom complimented Italy on the effective control of the epidemic, particularly with there having been two separate introductions of virus. He asked whether any light could be shed on the true origin of the fraudulent certificates. The Delegate of Italy said in both cases the certificates purported to be Croatian, but Croat colleagues had identified linguistic peculiarities which suggested otherwise. The Observer from the Czech Republic then gave information about the route taken to Italy by livestock vehicles. Commercial interests may encourage large, and illegal movements of livestock. This emphasized the great potential importance of the investigations carried out at the World Reference Laboratory. The Delegate of Italy concluded the present absolute block on the imports into the European Community of animals and animal products from eastern Europe was most undesirable, but in future there had to be no doubt about either the animals being imported or the documents which accompanied them.

6.5 The Delegate of Federal Republic of Yugoslavia said that there had been no vaccination there for more than 20 years, except for animals for export. He also said that Federal Republic of Yugoslavia may need emergency access to vaccine if a problem was found to be present there.

6.6 The Delegate of Turkey said that his country did not export either animals or animal products, and that because of an outbreak of rinderpest in 1991 the Bulgarian border had been closed even for goods in transit.

6.7 The Observer from Slovenia said that an EC mission had visited his country for six days and found there to be no problem. All documents relating to the transit of cattle entering Italy had been found to be satisfactory. But he did need more information from Italy, and was supported by the Observer from the Czech Republic who said that it was difficult to give much help unless information was fed back. In response the Delegate of Italy acknowledged the helpful information which had been received about the movement of vehicles, but said that all information received had been given to the police and prosecutors and so had to be confidential at present. In time however, the vehicle drivers involved would have to provide information.

6.8 The Delegate of Hungary said that there had been no foot-and-mouth disease there since 1973, that no vaccine had been used since 1990, and that no vaccine was produced in the country.

6.9 The Delegate of Israel said that the last outbreak there had been on 22 May 1992, one kilometre from the Lebanese border and 15 kilometres from the Syrian border. Pirbright had reported that the O isolate was not closely related to Israeli field isolates or vaccine strains and it was concluded that the outbreak must have been introduced into the country rather than indicating an endemic infection.

6.10 The Observer from Croatia re-emphasized that Croatia was not the origin of the Italian outbreaks. The type of cattle which had been imported into Italy did not exist in Croatia and he was certain that neither the cattle nor the certificates had originated there. His country did not import cattle from "eastern" countries, but does import from Austria.

6.11 The Delegate of the Netherlands asked about the vaccine strains to which the Italian isolate was most closely related. Dr. Donaldson said that the closest relationship was with O1 Manisa, a Turkish vaccine strain produced in Ankara, already included in the International Vaccine Bank, and planned to be included in the European vaccine bank. He would expect however that European O1 strains, at high antigenic mass would also give acceptable protection after repeated vaccination.

6.12 The Delegate from the United Kingdom said that it was important to ascertain which countries imported cattle from the former USSR, and under what conditions. The Delegate from Poland, based in a laboratory, was unable to provide any information. The Observer from the Czech Republic said that no cattle were imported from the former USSR. There had been a suggestion in the autumn 1992 that cattle for slaughter be imported from Latvia, but this had not been allowed. Imports of breeding cattle took place only from the European Community. He remarked that experiences with dourine during the autumn 1992 had made them extremely wary about any imports from the former USSR. The Delegates of Hungary and Federal Republic of Yugoslavia, and the Observers from Croatia and Slovenia, all said that no imports from the former USSR had taken place, and the Observer from Slovenia emphasized that they were an exporting rather than an importing state. No delegate from Bulgaria or Romania was present to give a response.

6.13 The Delegate of Italy asked that the Commission should maintain a list of institutions producing vaccine, particularly outside the European community, giving details of the type of vaccine produced and whether distribution was in state or private hands. In reply the Secretary said that he continuously monitored the situation. The Phyllaxia Institute in Budapest had ceased production, but the Hungarian Government may hold emergency stocks of vaccine. Romania had stopped production but two million doses were kept in reserve. The Sliven Institute in Bulgaria still produced some 200,000 doses of OAC to replenish reserves, but production was limited to a few months each year and participation in a vaccine bank had been recommended as an alternative policy. No vaccine was produced in Poland or in the Czech Republic. Three institutes in the former USSR were still producing vaccines of many types, but few details were available, and vaccine was also being produced in Ankara, in Iraq, in Egypt, and in Teheran.

6.14 Dr. Donaldson reminded the meeting that the Bulgarian outbreak in July 1991 had also been caused by virus of Middle Eastern origin, closely related to Turkish and Saudi Arabian strains. Infection must have been introduced from the Middle East, but the mechanism of doing so had not been identified. The Chairman concluded the discussion by looking forward to a change in European Community trade rules to help to resolve the problems which had been caused by the recent imposition of an absolute ban.

7. Activities of the Research Group in 1991 and 1992

7.1 The Chairman of the Research Group, Dr. Donaldson, presented the report which is included at Appendix 5, emphasizing the highlights but omitting those parts which were to be considered later as separate items in the Agenda. He commented that the Research Group felt that it had fulfilled a useful function and should continue to meet in the future, and that it had identified activities which needed to be pursued. The Chairman expressed appreciation for the excellent work which had been done by the Research Group.

7.2 The Delegate of Greece asked about the second Thrace survey which had been carried out in May and June 1992. A Tripartite meeting in January 1993 had been informed that some samples had proved positive to O and A22. Were these a risk, and should they be slaughtered? In reply Dr. Donaldson said that although there was no evidence of active infection in Thrace, a significant number of samples had proved sero positive and the biostatistician involved in the design of the survey believed the results to be significant. Seropositivity may have been due to the presence of infection in Thrace at an earlier stage, or to the illegal use of vaccine in the area. The Delegate of Turkey commented that illegal movement of animals from Anatolia into Thrace might also have occurred.

8. Review of the Commission's recommendations

8.1 The Chairman introduced three recommendations which had been adopted by the Fifty-fifth Session of the Executive Committee meeting in Toledo. The recommendations, full details of which are at Appendix 6, had also been accepted and agreed by the Research Group, and had been circulated to the FMD sub-group of the Scientific Veterinary Committee of the European Community, and to the FMD and Other Epizootics Committee of OIE. The documents which related to

i) Foot-and-Mouth Disease national contingency plans, including actions in non-vaccinating countries;

ii) security standards for FMD laboratories, and

iii) minimum conditions for the importation into Europe of live animals, fresh meat and offal of the bovine species,

were adopted unanimously.

9. Second phase of the buffer zone project in Turkey

9.1 The Secretary introduced the report on the second phase of the buffer zone project in Turkey, and the Delegate of Turkey described the FMD status and control methods used in his country. The papers are at Appendix 7. The Delegate of Turkey concluded by drawing attention to problems caused by lack of agreement about financial assistance from the European Community.

9.2 The Delegate of Greece asked why it was necessary to take strict sanitary control measures along the Greek border. In reply the Delegate of Turkey said that precautions were taken everywhere, there was no particular concentration on the Greek border.

9.3 The Observer from the Czech Republic asked about the vaccine strains used in the buffer zone, and whether the virus was modified in any way. The Secretary replied that antigen was immediately converted into fluid vaccine, and that no concentration took place: in Turkish circumstances this was unnecessary. The Observer from Morocco asked why cattle were vaccinated twice each year but sheep only once. The Secretary said that vaccination which could be achieved in a single round was inevitably incomplete and that the second round of vaccination helped to increase coverage. It would be preferable if the same

could be done for sheep but insufficient vaccine was available. However, experience had shown that the risk to small ruminants was limited if the cattle population was well protected.

9.4 The Delegate of Sweden asked about restrictions on the movement of animals into the buffer zone. Why did the disease increase during holy periods? Was the entry of animals to the buffer zone not prevented? In reply the Delegate of Turkey said that they did attempt to prevent the movement of animals but that this was particularly difficult during holy periods when large movements of animals took place and illegal movements did occur.

9.5 Dr. Donaldson (World Reference Laboratory) then presented a report on the serological survey carried out in Thrace in May-June 1992, details of which are also included in Appendix 7. The objective had been to determine the presence or absence of antibodies in a random statistical sample of animals. The intention had been to randomly select villages, but in practice the selection had been made by the Turkish authorities. Sampling was arranged at village rather than herd level to reflect agricultural practice in the area. 1,822 samples had been collected, 1,015 from cattle and 807 from sheep. All animals sampled were more than nine months and less than two years nine months of age, and all had remained in the villages where they had been born. Eleven cattle and four sheep proved to be sero-positive O1, and of these three were sero-positive Virus Infection Associated Antigen (VIAA). Fifty-five animals were sero-positive A22; 31 of these samples were selected and all were negative VIAA. Most of the positives were clustered in villages in the central area, but some had occurred near the Greek border. No suspect cases of disease were seen, and it was concluded that the titres did not indicate either current or recent infection. However, there may have been infection in the area in the past and some follow-up to the survey was desirable.

9.6 The Delegate of Greece was concerned about positive animals in villages close to the Greek border which, if still alive, could pose a threat to his country. Dr. Donaldson believed the threat to be very slight, particularly if the sero positive animals were sheep which do not carry virus for long. The Chairman commented that the advantage of a non-vaccinating area was that disease would not remain unrecognized there for long.

9.7 The absence of any agreement on financial support from the European Community to Turkey was discussed. The consequent lack of activity in Thrace and Anatolia outside the buffer zones was seen as a major threat to Europe, and the Observer from the European Community was asked to make the concerns of the Members of the Commission clear when he returned to Brussels. The Delegate of Turkey confirmed that vaccination in the buffer zone would continue, and that the extra samples from the Ankara Institute for which Dr. Donaldson had asked would be sent to the World Reference Laboratory as soon as possible. However, there would be no further survey in Thrace until the financial impasse had been resolved.

9.8 Dr. Donaldson commented that, despite problems over the larger package of measures, he hoped that an agreement on cooperation between the Pirbright and Ankara Institutes could be signed separately. It was intended that Pirbright would assist Ankara in diagnosis and epidemiology, and would train Turkish personnel who would carry out further surveillance in Thrace in cooperation with the Pendik Institute.

9.9 The Delegates of Italy and the United Kingdom were concerned that uncertainties had not been resolved, and the latter reminded the meeting that the Executive Committee, meeting in Toledo, had been concerned to note that outbreaks of FMD were still occurring in the strategic vaccination area in western Anatolia. The Committee had recommended that the policy of non-vaccination should continue in the Thrace area, and that sero-surveillance should be carried out on a regular basis in collaboration with the Turkish authorities in order to assess whether virus was circulating in that area. The Commission expressed concern that progress should be made, and adopted these recommendations.

10. The future of the Commission

10.1 The Chairman, introducing the subject, said that the future of the Commission had been debated at considerable length by the Executive Committee during the previous two years, and that a discussion paper and recommendations had been agreed by the Committee at their meeting in Toledo. He invited the Delegate of the United Kingdom to introduce the paper which is at Appendix 8.

10.2 The Delegate of the United Kingdom said that the discussion paper and recommendations represented the agreed consensus view of the Members of the Executive Committee. He summarized particular paragraphs, and drew particular attention to the proposed future aims of the Commission :

i) to monitor the FMD situation in the surrounding area and worldwide, and to disseminate the information obtained;
ii) to promote appropriate areas of research; and,
iii) to provide a forum to coordinate the prevention and control of FMD in Member Countries.

He also drew attention to the new objectives which were being recommended

i) to establish effective surveillance and monitoring of the FMD situation in collaboration with surrounding countries (a more active role than the information gathering and dissemination exercise currently performed by OIE);

ii) to encourage the development and implementation of policies and strategies to ensure a prompt and effective response to outbreaks of FMD in these countries. Any action proposed outside the territories of Member Countries would have to be separately funded.

10.3 The Executive Committee were particularly keen that the costs of the Commission at worst would not increase, and if possible should be reduced, and that the time spent by Delegates on the work of the Commission should also be reduced. The Executive Committee had therefore agreed that the following recommendations should be submitted to the Thirtieth Session for approval and adoption:

- **Proposals**

i) The Commission should continue in being, operating under Art. 14 of the FAO Constitution.

ii) The future aims of the Commission should be those set out above.

iii) The new objectives should be those set out above, and these should be additional to existing objectives.

iv) Meetings of the General Session should continue to be held biennially in Rome, but should in future be as short as possible consistent with the Agenda to be discussed: it was anticipated that under normal circumstances a maximum of three days would suffice.

v) The Executive Committee should continue to have eight members, and contain members from different areas.

vi) The Research Group should continue to meet regularly, but costs should be minimized by arranging joint meetings with EC Scientific Veterinary Committee, and by attendant's costs being paid by national authorities other than in exceptional circumstances.

vii) The services of the Administrative Assistant should be retained, and this post should remain with the Animal Health Service of the Animal Production and Health Division of FAO.

viii) The post of Technical Secretary should lapse when Dr. Stouraitis retired in May, being no longer required given the FMD disease free situation which now pertained in Europe. Scientific and technical work which had been done by the Secretary should, in future be contracted out as required to other institutions and bodies such as the World Reference Laboratory, the European Commission or FAO.

ix) A consultant should be appointed to act as Liaison Officer to coordinate the activities of the bodies contracted under para viii, and to provide a link between those bodies and the Chairman and the Executive Committee. Employment would be on a part-time basis, not exceeding 20 days per year, and the individual appointed would be expected to be conversant with the current FMD situation worldwide. The post might suit the person who had recently retired from an FMD laboratory, or international or national organization concerned with the control of FMD.

The Delegate of the United Kingdom concluded by saying that he recognized that the issue of the post of technical Secretary was the most contentious of the recommendations.

10.4 Dr. Cheneau, speaking on behalf of the Animal Production and Health Division then presented the FAO viewpoint. The relevant document and copy of the letter dated 23 March

1993 from the Director of AGA to the Chairman, both of which had been distributed to all Delegates, are at Appendix 9. He preferred to see a new Technical Secretary appointed on a full time basis, and considered that it was contradictory to assign new objectives to the Commission whilst at the same time limiting professional input by contracting work out. He believed that FAO was in the best position to respond to the new objectives, but admitted that there may be financial consequences in doing so. He had distributed a copy of the letter sent by Dr. Cunningham to the Chairman of the Executive Committee following the meeting at Toledo in February, which had preceded the outbreaks of foot-and-mouth disease in Italy. Although preferring a full-time appointment, FAO had kept the door open for a 50% compromise solution, but if this was followed it had to be recognized that only 50% of the Secretary's time spent would be devoted to the work of the Commission. It must also be recognized that under these circumstances FAO would not recruit specifically for the job. He had also distributed a paper prepared by the Animal Health Service, Animal Production and Health Division, which considered the FMD situation worldwide. In conclusion he said that the view of FAO and his Division was that the Commission should continue in being with a full time Secretary and if this happened his Division would continue to provide full support.

10.5 The Chairman then invited FAO Legal Counsel to speak. He said that he had problems with some of the proposals, and that these were fundamental rather than simply legalistic. His main concern was about the post of Technical Secretary, which the Executive Committee had proposed should be abolished and the work contracted out. The Constitution provided that there should be a Secretary, appointed by the Director-General with the approval of the Executive Committee and employed under FAO conditions of service. In his view abolition of the post would be in breach of the Constitution. FAO required the appointment of a Secretary for reasons of impartiality: he did not see that contracting out responsibilities to "national" body would fulfil this requirement, and believed that under those circumstances impartiality would inevitably be lost. There was however, power to contract out certain services, and there was no reason why the post of Secretary should be full-time, as opposed to part-time: such an arrangement would not prejudice his international and impartial role. In response to a request from the Chairman for an explanation about the independence of *Art.XIV Bodies* Counsel said that such bodies are semi-independent: they have their own legal life and considerable autonomy. But they can never be completely autonomous: they must be subject to the rulings of FAO Conference and have to take account of the views of all FAO Member Nations, not just those who are members of the European Commission.

10.6 Concluding the introductory remarks Dr. Cunningham (FAO) emphasized the fruitful discussions which had taken place during the previous two years between FAO, the Animal Production and Health Division, and the Executive Committee of the European Commission for the Control of FMD. There had been a considerable meeting of minds, and FAO had recognized that the terms of reference of the Commission could not be extended to encompass areas outside Europe. Other Commissions would have to accept those responsibilities. The only substantial point of difference between FAO and the Executive Committee concerned the post of Technical Secretary.

10.7 Following extensive discussion by delegates and observers a consensus view emerged which was elucidated by the Chairman. The recommendation of the Executive Committee

that a new Technical Secretary should not be appointed was obviously unacceptable on legal grounds. In six years or so the situation may have changed so that the responsibility for coordinating action could pass to the European Community, but that time had not yet arrived. The general view of delegates and observers was that the present Commission should continue, with a new Technical Secretary being appointed at a lower grade on a two year contract. If the appointment was only part-time some independence would inevitably be lost, and a full time appointment might therefore be preferable.

10.8 Dr. Cunningham agreed that a full time appointment would be preferable, and confirmed that there would be no objection to an appointment at a lower grade or for a two year term which, in any case, was the norm within FAO. He did not wish to interfere with the Commission's independence, and did not have the expertise to do so if he did. Nor did he object to procedural changes which were intended to save money. If the recommendation was agreed he suggested that Dr. Cheneau should be given responsibility for ensuring continuity during the inter-regnum whilst a new Technical Secretary was recruited. He confirmed that any appointment would be made by the Director-General of FA0 with the approval of the Executive Committee of the Commission.

10.9 Delegates then agreed unanimously that the Commission should continue in being for a period of two years in the first place, after which the position would be reviewed, and that a new Technical Secretary should be recruited and appointed to work full-time at P-4 level on a two year contract. The question of a part-time appointment therefore did not arise.

10.10 The recommendations of the Executive Committee were therefore amended to read as follows:

i) The Commission should continue in being, operating under Art.14 of the FAO Constitution;

ii) The future aims of the Commission should be

   a) to monitor the FMD situation in the surrounding area and worldwide, and to disseminate the information obtained;

   b) to promote appropriate areas of research; and,

   c) to provide a forum to coordinate the prevention and control of FMD in Member Countries.

iii) The new objectives of the Commission would be

   a) to establish effective surveillance and monitoring of the FMD situation in collaboration with surrounding countries (a more active role than the information gathering and dissemination exercise currently performed by OIE);

   b) to encourage the development and implementation of policies and strategies to ensure a prompt and effective response to outbreaks of FMD in these countries. Any action proposed outside the territories, the Member Countries would have to be separately funded.

These objectives would be additional to those which already existed.

iv) Meetings of the General Session should continue to be held biennially in Rome, but should in future be as short as possible consistent with the agenda to be discussed. It was anticipated that under normal circumstances a maximum of three days would suffice, and that reports should be as brief and concise as possible.

v) The Executive Committee should continue to have eight members and to contain members from different areas.

vi) The Research Group should continue to meet regularly, but costs should be minimized by arranging joint meetings with the EC Scientific Veterinary Committee, and by the costs of those attending being paid by national authorities, other than in exceptional circumstances. This would mean that biennial open meetings would be arranged by FAO and chaired by the Chairman of the Research Group, and that other ad-hoc meetings would be organized and chaired by the Chairman of the EC Scientific Veterinary Committee, with the Commission of the European Community being responsible for inviting outsiders.

vii) The services of the Administrative Assistant should be retained.

viii) A Secretary should be recruited by FAO, in accordance with Art. XII of the Constitution, and appointed by the Director-General with the approval of the Executive Committee for a two year period at P-4 level.

10.11 The Delegate of Ireland proposed a vote of thanks to the Executive Committee and its Chairman, to FAO, to Dr. Taylor for his work in drafting the discussion paper, and to all those who had been involved in the preparation of papers. Without their work the unanimously agreed and satisfactory outcome which had been achieved would not have been possible.

11. Financial Report

11.1 The Administrative Assistant introduced the financial report which had been distributed to Delegates. A number of inconsistencies were noted and concern was expressed about contributions which might or might not have been outstanding, and about the deficits which seemed likely to occur in 1993 and 1994. A revised financial report, which is at Appendix 10, was therefore prepared and discussed in the presence of a representative from the FAO Field Programmes Section.

11.2 The representative from the Field Programmes Section explained that if contributions were paid in local currency, rather than in dollars, any currency fluctuation which occurred before conversion could result in underpayment of the contribution due. The problem could be avoided if payment was made in US dollars. Delays and mistakes would also be avoided if the correct reference - TF 904200.MTF/INT/011/MUL - was always sent with the contribution. In reply to a question from the Delegate of Switzerland it was explained that interest was charged on any deficit in a Trust Fund.

11.3 A budget deficit had been forecast, and the Delegate of Ireland was concerned that insufficient notice had been received to enable any decision about increasing contributions to be taken during the Session. The Administrative Assistant explained that uncertainty about the future of the Commission had made it impossible to give delegates advance notice on this occasion, and that the absence of notice made it impossible for delegates who needed to do so to obtain formal approval from their Finance Departments. A decision to increase contributions could not, therefore, be agreed during the Thirtieth Session.

11.4 Any increase adopted by Members at the Thirty-first Session could not be implemented until 1 January 1996, by which time the deficit might have become unacceptably large. The Chairman, therefore, suggested that the Executive Committee be asked to keep the situation under review, and given a mandate to recommend an increase in the scale of contributions in an emergency. Such an increase would be effective from 1 January 1994 or 1995, depending on when action was taken, but implementation would be dependent on agreement by at least two thirds of members following receipt of a Note Verbale from the Director-General of FAO which explained why the increased contribution was needed. It was agreed that the Executive Committee should be given the mandate which the Chairman had suggested, although the Delegates of Greece and Turkey both expressed reservations about any increase in contributions, and the Delegate of Greece said that he would present a report to his Government on his return to Athens.

11.5 The Delegate of the United Kingdom reviewed the levels of contribution made by different groups of countries, and proposed that Romania, as a new Member, be placed in the same group as Austria, Finland, Hungary, Turkey, Federal Republic of Yugoslavia and the former Czechoslovakia. The Delegate of Romania accepted the proposal, which was adopted unanimously.

11.6 The Chairman concluded the discussion by appealing to any member country which was in arrears with contributions to make good the deficit immediately, and again emphasized the importance of ensuring that all contributions be clearly referenced to the appropriate FAO Trust Fund. He also suggested that Member Countries should review their present contributions, and consider whether a voluntary move to a higher scale would be appropriate.

11.7 The Financial Report was adopted.

12. Election of Chairman, Vice Chairmen and Members of the Executive Committee, and appointment of Members of the Research Group

12.1 The following were elected to membership of the Executive Committee:

Chairman	*Proposed by*	*Seconded by*
Dr. K.C. Meldrum (UK)	Dr. E. Stougaard (Denmark)	Dr. G. Bédès (France)
First Vice-Chairman		
Dr. B. Nordblom (Sweden)	Dr. K. Meldrum (UK)	Dr. R. Berger (Finland)
Second Vice Chairman		
Dr. E. Stougaard (Denmark)	Dr. B. Nordblom (Sweden)	Dr. R.G. Cullen (Ireland)

Executive Committee Members

Dr. G. Bédès (France)	Dr. E. Stougaard (Denmark)	Dr. L. Hallet (Belgium)
Dr. E. Istanbulluoglu (Turkey)	Dr. E. Stougaard (Denmark)	Dr. R. Erdem (Turkey)
Dr. R. Marabelli (Italy)	Dr. C. Vella (Malta)	Dr. P. Weber (Austria)
Dr. A. Nagy (Hungary)	Dr. M. Valcic (Yugoslavia)	Dr. E. Ontanu (Romania)
Dr. N. Voetz (Germany)	Dr. R. Berger (Finland)	Dr. P. Gafner (Switzerland)

12.2 In addition to Dr. A. Donaldson, World Reference Laboratory, UK, who is an ex-officio member of the Group, the following were unanimously nominated to be members of the Research Group:

Dr. C. Terpstra (Netherlands)
Dr. M. Eskildsen (Denmark)
Dr. G. Panina (Italy)
Dr. R. Ahl (Germany)
Dr. W. Schuller (Austria)
Dr. H. Ozturkman (Turkey)
Dr. H. Yadin (Israel)

12.3 The term of office of the present members of the Research Group expires on 31 July 1993. According to FAO procedures the appointment of new members is subject to Government clearance, and the delegates of Austria, Turkey and Israel were asked to arrange for a short curriculum vitae for those members from their countries be sent to the Secretariat as soon as possible. Delegates were also asked to send written confirmation of the positions now held by those who were members of the present Research Group.

13. ***Other business***

13.1 The delegate of Yugoslavia reminded members that his country had remained free of FMD for 20 years, and by doing so had helped to achieve the objectives of the Commission. In present circumstances Yugoslavia would have to appeal for help to obtain vaccine if an emergency should occur. The Chairman was sympathetic but pointed out that the Commission could not resolve political problems.

13.2 The Secretary reminded the meeting of the great changes which had occurred since the Commission was established in 1954, and recommended that the scale of contributions should be reviewed to assess whether in the light of the changed circumstances, particular countries were now in the appropriate group. The delegate of Yugoslavia asked whether his country's contribution would be reassessed, but the Chairman said that there would be no change at present.

14. ***Adoption of the Draft Report of the Thirtieth Session***

14.1 The draft report was adopted subject to agreed amendments, and to revision of Section 11 to reflect discussion which had taken place after the report had been drafted.

15. ***Closing Remarks***

15.1 In his closing address the outgoing Chairman paid tribute to the Secretary, Dr. Stouraitis, who was about to retire, thanking him for the dedication and enthusiasm he had shown during his 15 years of service to the Commission. He also thanked Dr. Cunningham and Dr. Cheneau

for their interest in the work of the Commission and for their contribution to discussions during the previous two years, and Dr. Gafner and Dr. Cullen - both of whom would have retired before the next Session - for their contribution over many years.

15.2 He also thanked the Administrative Assistant, Miss Raftery, for her support during the Session and during his time in office, and asked Dr. Donaldson to convey his thanks to all members of the Research Group for their invaluable work. Finally, he thanked the rapporteur, Mrs. Tavella (who had typed the draft with great efficiency), the interpreters, and all delegates and observers who had contributed to an excellent meeting.

15.3 The delegate of the UK, speaking on behalf of all, thanked Dr. Stougaard for his work as Chairman during a very busy period of office, and for the leadership he had displayed. It was fortunate that his advice and experience would continue to be available to the Executive Committee.

16. ***Date of Thirty-first Session***

It was recommended that the Thirty-first Session of the Commission should be held in Rome during spring 1995, the dates to be agreed by the Executive Committee.

Provisional arrangements were also made for the Fifty-sixth Session of the Executive Committee to be convened during spring 1994.

Appendix 1

Report on the Commission's activities during 1991-1992

General

After almost forty years of combatting FMD in Europe, thanks to the joint efforts of all countries individually and the European Commission for the Control of FMD in particular, it has been possible to achieve the present favourable disease situation. The plague of FMD, which for centuries has decimated European livestock, has been brought under control and eradicated. Europe is now facing a new era of disease freedom without vaccination.

At present it is difficult to foresee the results of the policy applied by the European Community countries and non-EC countries in Europe. Certainly, during the initial phase of this policy, the number of problems which could arise should find a prompt and effective solution. It is essential that countries should be ready to take immediate action adequate to the situation, including logistic support for its proper implementation.

Special activities

1. The Commission countries have followed the recommendations made by the Twenty-ninth Session held in Rome in April 1991, and by the Sessions of the Executive Committee; all recommendations have been made in conformity with the Commission's Constitution.

The Executive Committee has held two regular Sessions: the Fifty-fourth in Pirbright, U.K., in April 1991, and the Fifty-fifth in Toledo, Spain, in February 1993. An ad hoc meeting was convened by the Executive Committee on the occasion of the OIE Regional Conference for Europe held in Istanbul in September 1992.

The Research Group of the Standing Technical Committee of the Commission held a Session in Ankara in October 1991, and an open Session in Mittelhäusern, Switzerland, in September 1993.

The reports of the Executive Committee Sessions and of the Research Group have been distributed to all member countries of the Commission, and to interested Governments and International Agencies.

2. The Secretary maintained close contacts with the members of the Commission and with the countries in the areas of interest to the Commission in order to have constantly to hand information on the evolution of FMD, and the measures adopted for its control and eradication. Information on the FMD situation for 1991-1992 in member countries of the Commission, in the former USSR and in other regions, is given at Appendix 2.

3. The present political disturbances in some areas within Europe, and in areas surrounding Europe, are of great concern to the Commission.

The FMD situation in those areas was kept under constant review through information received from the countries concerned, the OIE and the WRL, Pirbright, U.K. - see Appendix 2, Table 2 and Cumulative Report of WRL for 1991 and 1992.

4. The Commission places considerable importance on the disease free situation in southeastern Europe and on the results of the surveys which were carried out by the WRL in 1992 in Turkish Thrace area. The results of these surveys are given at Appendix 7.

The establishment of the strategic vaccination area in western Anatolia, Turkey, and its implementation, was constantly monitored and the policy applied by the Turkish Veterinary Services was reviewed and discussed by the Executive Committee and the FAO/OIE/EC FMD Group.

5. The FMD situation in other regions of particular interest to Europe has been monitored by the Secretary, and assistance was provided to cope with FMD emergencies in countries in other areas in the world.

6. The Research Group activities and the recommendations made on the items referred to the Group by the Commission, are provided in the relevant reports which have been distributed to all concerned. A summary of the conclusions and recommendations made is provided at Appendix 5.

7. The Commission participated in all relevant FA0 activities through its Secretary, whom FA0 entrusted with responsibility for technical advice and backstopping of programmes in the field of FMD control and vaccine production laboratories supported through UNDP/FA0 and Technical Cooperation Programme (TCP) projects dealing with regular programmes and with emergency assistance to countries facing FMD outbreaks, development of field programmes, recruitment of experts, advice on the planning, backstopping and evaluation of FMD projects and the setting up of FMD laboratories in different parts of the world, Bulgaria, Turkey, Myanmar, India, Tunisia, Libya.

In addition, the Secretary participated in and conducted the two FAO Seminars on Emergency Disease simulation organized in 1992 in Tunisia for Anglophone and Francophone countries in Africa.

8. The Commission maintained close contact and collaboration with OIE, EC, and through the Panaftosa Center, with COSALFA Commission in South America, and with other international organizations in matters related to FMD.

9. **Missions**

Since the Twenty-ninth Session of the Commission held in April 1991, the Secretary carried out the following missions in relation to the Commission's activities (cost met from the Commission's Trust Funds) and in relation to FA0 activities (costs met from Regular Programme or from project funds).

Commission

1991

- Fifty-third Session of Executive Committee, Stockholm, Sweden, 4-7 February
- Tripartite FMD Group, Brussels, Belgium, 20-22 March
- Twenty-ninth General Session of the Commission, Rome, Italy, 23-26 April
- Fifty-ninth General Session of OIE, Paris, France, 12-28 May
- Discuss FMD policy at national/European level, Prague, Czechoslovakia, 9-13 June
- Research Group, Ankara, Turkey, 1-5 October
- Tripartite FMD Group, Brussels, Belgium, 26-29 November

FAO

- Yangoon, Myanmar, 9-13 September
- Sliven, Sofia, Bulgaria, 4-9 November

1992

Commission

- OIE and other Epizootics Commission, Paris, France, 18-23 January
- Fifty-fourth Session Executive Committee, Pirbright, U.K., 7-9 April
- Sixtieth General Session OIE, Paris, France, 16-22 May
- Research Group Session, Mittelhäusern, Switzerland, 8-11 September
- Fifteenth Conference OIE Regional Comm. for Europe/Ad hoc meeting of Executive Committee, Istanbul, Turkey, 20-25 September

FA0

- Joint FAO/OAU Emergency Animal Disease Preparedness Workshop SECNA, Tunis, 22-29 April
- FMD Institute, Sliven, Bulgaria, 26 September-2 October
- FA0 Emergency Diseases Regional Training Workshop, Tunis, Tunisia, 19-23 October
- Review FMD situation, Iran, 17-23 November
- Review FMD situation, Philippines, 24 November-1 December
- Discuss FMD situation, Hong Kong, 1-3 December.

10. Membership

Following the geopolitical developments in Europe which resulted in the separation of Czechoslovakia into two independent Republics, the former Czechoslovakia ceased to exist and, therefore, as of 1 January 1993, is no longer a member of the European Commission.

The situation in the former **Jugoslavia** has not yet been clarified and consequently its position as a member of the Commission remains unclear.

Romania submitted an application for membership to the Director-General of FA0 which was accepted and became effective from 4 February 1993.

11. Future of the Commission

As a follow-up to the recommendations made at the Twenty-ninth Session of the Commission in April 1991, the Executive Committee discussed the future of the Commission. For this purpose a draft paper regarding the possibility of a new Commission being established was prepared by Dr. K.C. Meldrum, CVO, U.K. This draft was discussed and amended at an ad hoc Session of the Executive Committee held in Istanbul in September 1992, on the occasion of the 0IE Conference of the Regional Commission for Europe, and at the Fifty-fifth Session of the Executive Committee held in Toledo, Spain, from 16 to 18 February 1993. The revised text of this paper is provided at Appendix 8.

12. Highlights

The European Commission for the Control of FMD, which was established in 1954, with the task to control and eradicate FMD from Europe, has achieved its objectives.

- Europe is free from FMD; there have been no outbreaks since 1989
- Vaccination has been discontinued in all European countries as of 1991
- FMD virus manipulation and vaccine production has been stopped in the European Laboratories. Production is permitted only in those laboratories approved by the European Community.
- Strategic vaccine stocks, or banks, have been established by individual countries or groups of countries.
- The European Community is in the process of setting up their own banks which could be used also to assist non-EC countries in Europe facing an emergency FMD outbreak.
- Contingency plans to cope with FMD have been prepared and harmonized in all European countries (EC and non-EC).

Europe has set up a strong defence system against FMD which, if properly implemented, by all countries will work efficiently.

Appendix 2

FMD situation in Europe and in other regions 1991-92

EUROPE

Europe has remained free of foot-and-mouth disease (FMD) during 1991 and 1992 (Table 1). The isolated outbreak which occurred in Bulgaria in July 1991 was brought under control with ring vaccination and stamping out of all animals on the infected premises. Detailed information is given in the report of the Fifty-fourth Session of the Executive Committee, Pirbright, U.K. 7-9 April, 1992.

Turkey

Thrace area continues to remain FMD free and the serological survey which was carried out in 1992 by the Pirbright Laboratory U.K. in Thrace area, Turkish side, to ascertain the FMD status following cessation of vaccination in that area in 1989 demonstrated that although some samples had shown a high seropositive titre of antibodies against 01 and A22 virus type, there was no evidence that virus was circulating in this area.

In Anatolia, FMD virus type 01 and A22 continue to cause outbreaks, including the strategic vaccination area (buffer zone) in western Anatolia. The FMD incidence in Anatolia has decreased considerably from 1991 to 1992 with type 0_1 virus dominant in the outbreaks reported. In the strategic vaccination area (buffer zone), western Anatolia, the number of outbreaks reported for 1991 was 142 and for 1992, 66.

Israel

Two outbreaks of type 0_1 were reported in the controlled territories.

Former USSR area

Six sporadic outbreaks were reported in 1991, five of type 01 and one of type A22, all in the southeastern area. As far as the FMD situation in this area is concerned, the information provided was received before the geopolitical changes in the former USSR. Information on the disease situation and control programmes carried out by the countries which have been declared independent States is not available at the present time. However, the political changes in the former USSR and in eastern Europe have probably stopped the movement of animals from east to west and consequently the risk of FMD transfer through such animal movement has decreased. In addition, the FMD situation in the eastern part of Europe is now clear and reliable.

FMD SITUATION IN OTHER REGIONS

An assessment of the disease situation worldwide is difficult due to the paucity of information and the negligence of some countries and regions, in reporting disease incidence to neighbouring countries or regions and to the international Organizations concerned. Information available on the FMD situation during 1991 and 1992 is reported in Table 2.

Near East Region

North African countries Sporadic FMD outbreaks of type 01 continue to be recorded in Egypt, Tunisia, Algeria and Morocco. In Libya no outbreaks have been reported during the period under review.

The outbreaks reported in Tunisia, Algeria, and Morocco occurred mainly in small ruminants and relate to the first appearance of the FMD outbreaks in Tunisia and Libya in November 1989. Despite the mass vaccination carried out in Tunisia, it has not been possible to eradicate the disease. Because of the non-frontier policy which exists in the MAGREB countries, the disease also invaded

Algeria and Morocco where it still persists in sporadic form due to the free movement of animals at the borders between the three countries.

Middle East countries Outbreaks of foot-and-mouth disease continue to be reported throughout the Middle East. The information provided by the WRL, Pirbright, U.K. shows that types 01, A22 and ASIA 1 virus were isolated and that through the use of improved diagnostic procedures it was shown that some samples contained more than one serotype of FMD virus (01 and A) and one sample contained 01, A and ASIA 1. A similar phenomenon was identified in samples from Turkey. This phenomenon needs to be further investigated in order to clarify epidemiological aspects of FMD virus until now unknown.

The political disturbances and the consequences of such a situation in the area seriously affected the animal disease prophylaxis and control programmes with a consequent flare-up of FMD and Rinderpest which reached the borders of Europe in 1991.

The FMD as well as other exotic diseases situation in the Middle East area is a matter of concern for the whole of Europe since this area represents a potential threat because of the persistence of disturbances which constitute a further reason for deterioration of the animal health situation in general.

Africa

FMD is widespread on the continent with endemic or sporadic outbreaks of type 0, A, SAT1 and SAT2 recorded in various countries with the exception of Botswana which continues to maintain its disease-free status since 1981.

Many of the African countries do not submit samples to the WRL, Pirbright, for diagnosis and typing, and the OIE designated Reference Laboratory for FMD in Botswana has not proved to be very active in its role. However, the information provided by the WRL, Pirbright, U.K. is an indication of the disease situation in the area. The presence of more than one serotype in samples examined at the WRL is a matter for in-depth investigation (see WRL Cumulative Report for 1992, attached hereto).

Due to the lack of information available, an assessment of the epizootiological picture of FMD is difficult. However, it should be recognised that FMD in a number of countries is of minor importance in comparison with diseases such as Rinderpest, Pleuropneumonia and other infectious and parasitic diseases which affect the animal population in Africa.

Asia

FMD is endemic on the mainland from Iran to Cambodia with virus types A,0,C & ASIA 1 officially diagnosed in samples sent to the WRL, Pirbright, U.K. No information is available from China and Mongolia while type 0 is regularly reported in the slaughterhouse in Hong Kong in animals imported daily from China.

In the southern countries of Asia, Malaysia, after being declared free from FMD, has been affected by types 01 and ASIA 1. In the Philippines, the disease has been recorded only in Luzon Region, in the northern part of the country, where outbreaks of type C3 have been diagnosed.

South America

The disease situation continues to improve and efforts are being made by the national authorities concerned to achieve the target of disease control and eradication within the year 2000. Uruguay is free from FMD for three years now and has applied to OIE for recognition as an FMD free country with vaccination.

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Table 1

FMD POSITION IN EUROPE 1991- 1992
(By country, number of outbreaks and virus type)

Country		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	0ct.	Nov.	Dec.	Total
Bulgaria 1991		-	-	-	-	-	-	1 0_1	-	-	-	-	-	1 0_1
Turkey	1991	76	55	45	77	97	109	123	47	53	45	29	62	818
	1992	19	22	23	18	18	7	13	49	51	17	20	21	278 $A_{22}/0_1$
Israel	1991	-	-	2 0_1	-	-	-	-	-	-	-	-	-	2 0_1
	1992	-	-	-	-	1 0_1	-	-	-	-	-	-	-	1 0_1
Fed.of Russia	1991	-	-	-	1 0_1	-	-	1 0_1	-	3 0_1	1 A_{22}	-	-	6 $0_1/A_{22}$
	*1992					1 - 0								1 - 0
Remainder of European countries disease free														

Information provided by National Veterinary Services, WRL and 0IE
- = No outbreaks
* = No information

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Table 2

FMD position and virus types in the Near East during 1991-92

Countries	No. of outbreaks	1991	1992	Virus type**	Remarks
Tunisia	sporadic	30	16	0_1	vaccination cattle/sheep and goats
Morocco	sporadic	20	59	0_1	stamping out + vaccination
Algeria	sporadic	154	34	0_1	ring vaccination
Libya	no outbreaks				vaccination
Egypt	sporadic	28		0_1	vaccination
Iraq*	--	...		-- ...	no information
Iran*	endemic	203	56	$0_1/A_{22}$	vaccination
Syria	sporadic	1	17	0_1	outbreaks occurred period Feb.-May
Jordan	sporadic	...		0_1	...
Lebanon	endemic			$0/A_{22}$ ...	no information reported
S. Arabia	endemic			$0_1/A_{22}$/ASIA 1	ring vaccination
Kuwait	sporadic			0_1	
Bahrain	sporadic			0_1 2 0_1	...
Oman	endemic	33	...	0_1	...
U.A.E.	sporadic		6	0_1	...
Republic of Yemen	sporadic		1	0_1	...

* FMD vaccine production plant
** Information provided by the WRL, OIE, and National Veterinary Services
\+ Outbreaks not officially reported
... No information available
a:\ap2ne91.92

INSTITUTE FOR ANIMAL HEALTH
PIRBRIGHT LABORATORY
Ash Road, Pirbright, Woking, Surrey, GU24 ONF, U.K.

WORLD REFERENCE LABORATORY FOR FOOT-AND-MOUTH DISEASE

CUMULATIVE REPORT FOR 1991

COUNTRY	No. of Samples	O	A	C	SAT1	SAT2	SAT3	ASIA1	SVD	NVD
BAHRAIN	6	2	-	-	-	-	-	-	-	4
BENIN	4	-	-	-	-	-	-	-	-	4
BHUTAN	10	-	-	4	-	-	-	-	-	6
BULGARIA	1	1	-	-	-	-	-	-	-	-
BURUNDI	2	-	-	-	-	2	-	-	-	-
CAMBODIA	4	-	-	-	-	-	-	3	-	1
ETHIOPIA	10	2	-	-	-	4	-	-	-	4
GHANA	12	-	-	-	-	3	-	-	-	9
HONG KONG	11	7	-	-	-	-	-	-	4	-
ITALY	2	-	-	-	-	-	-	-	2	-
KENYA	11	8	-	-	2	1	-	-	-	-
MALAYSIA	24	-	-	-	-	-	-	-	-	24
MALI	7	-	-	-	-	6	-	-	-	1
MOROCCO	10	6	-	-	-	-	-	-	-	4
MYANMAR	11	4	-	-	-	-	-	6	-	1
NEPAL	*32	13	-	2	-	-	-	1	-	17
OMAN	58	33	-	-	-	-	-	-	-	25
SAUDI ARABIA	53	45	8	-	-	-	-	-	-	-
SOVIET UNION	3	1	1	1	-	-	-	-	-	-
SRI LANKA	2	2	-	-	-	-	-	-	-	-
SYRIA	1	1	-	-	-	-	-	-	-	-
THAILAND	5	3	-	-	-	-	-	2	-	-
TURKEY	+20	19	2	-	-	-	-	-	-	-
ZIMBABWE	21	-	-	-	-	4	1	-	-	16
TOTAL	320	147	11	7	2	20	1	12	6	116

* 1 SAMPLE CONTAINED BOTH FMDV TYPE O AND TYPE C
+ 1 SAMPLE CONTAINED BOTH FMDV TYPE O AND TYPE A

126 OUT OF 163 POSITIVE SAMPLES TESTED BY ELISA (77%) WERE TYPED AS ORIGINAL SUSPENSION AND THE REMAINDER WERE TYPED AS TISSUE CULTURE.

NPF, 6th January 1992

INSTITUTE FOR ANIMAL HEALTH
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WORLD REFERENCE LABORATORY FOR FOOT-AND-MOUTH DISEASE

CUMULATIVE REPORT FOR 1992

COUNTRY	No. of Samples	O	A	C	SAT1	SAT2	SAT3	ASIA1	SVD	NVD
ALGERIA	1	-	-	-	-	-	-	-	-	1
BANGLADESH	2	-	-	2	-	-	-	-	-	-
BAHRAIN	7	7	-	-	-	-	-	-	-	-
BURKINA FASO	4	3	-	-	-	-	-	-	-	1
CAMBODIA	10	3	-	-	-	-	-	-	-	7
ETHIOPIA	4	4	-	-	-	-	-	-	-	-
HONG KONG	15	15	-	-	-	-	-	-	-	-
ISRAEL	3	3	-	-	-	-	-	-	-	-
ITALY	1	-	-	-	-	-	-	-	1	-
KENYA*	38	2	2	-	-	37	-	-	-	1
MALAWI	16	-	-	-	-	-	-	-	-	16
MALAYSIA	15	4	-	-	-	-	-	4	-	7
MOROCCO	10	3	-	-	-	-	-	-	-	7
NAMIBIA	1	-	-	-	-	1	-	-	-	-
NETHERLANDS	4	-	-	-	-	-	-	-	4	-
RWANDA	6	-	-	-	-	1	-	-	-	5
SAUDI ARABIA+	40	18	16	-	-	-	-	11	-	-
THAILAND	1	1	-	-	-	-	-	-	-	-
TUNISIA	4	1	-	-	-	-	-	-	-	3
TURKEY	3	1	2	-	-	-	-	-	-	-
UGANDA	3	2	-	-	-	1	-	-	-	-
UNITED ARAB EMIRATES	8	6	-	-	-	-	-	-	-	2
UNITED KINGDOM	36	-	-	-	-	-	-	-	-	36
YEMEN	8	1	-	-	-	-	-	-	-	7
ZAMBIA	3	-	-	-	2	-	-	-	-	1
TOTALS	243	74	20	2	2	40	-	15	5	94

* 1 SAMPLE CONTAINED BOTH FMDV TYPES O AND SAT2
1 SAMPLE CONTAINED BOTH FMDV TYPES A AND SAT2
1 SAMPLE CONTAINED FMDV TYPES O, A AND SAT2

\+ 5 SAMPLES CONTAINED BOTH FMDV TYPES O AND ASIA 1

130 OUT OF THE 149 POSITIVE SAMPLES (87%) WERE TYPED AS ORIGINAL SUSPENSION AND THE REMAINDER (13%) WERE TYPED AS TISSUE CULTURE.

NPF, 1st January 1993

Appendix 3

(a) FMD prophylaxis in Europe 1991-1992
(b) Vaccination programme 1991-1992

In 1991, the foot-and-mouth disease vaccination programme was carried out in a number of countries in Europe; as of 1 January 1992, vaccination against FMD was discontinued on the whole of the European continent.

Information received on arrangements made for a strategic reserve of FMD vaccine by individual governments or by groups of governments participating in a vaccine bank other than those set up by the European Community, and preparation of a National Contingency Plan for Emergency Action against FMD, is given in the table on FMD prophylaxis attached hereto. This table summarises the FMD policy in Europe based on the recommendations of the EUFMD Commission as adopted by EC and non-EC countries.

Strategic reserves based on fluid vaccine, or in the form of concentrated antigen, of all virus types which may constitute a potential threat for Europe, have been established by individual countries, or groups of countries as in the case of the International Vaccine Bank in U.K.

The National Contingency Plan for emergency action against FMD has been prepared in conformity with the European Community Plan; thus the FMD surveillance and control policy has been harmonised in the whole of Europe.

FMD PROPHYLAXIS - STRATEGIC RESERVES OF FMD VACCINE AND NATIONAL CONTINGENCY PLANS BY COUNTRY IN EUROPE DURING 1991/1992

VACCINATION PROGRAMMES				
Country	**Species vaccinated**	**Period of vaccination**	**Strategic reserve of vaccine (bank)**	**National contingency plans**
Albania	No vaccination	-	no information	no information
Austria	1991 Cattle: 17,604	Animals for export if required until 3 March 1991; since then vaccination prohibited	50,000 doses FMD vaccine stored at Federal Institute, Vienna. Negotiating with European Vaccine Bank.	National contingency plans conform with FA0/EEC plans
Belgium	1991 Cattle: 1,879,950	From 1 Dec. to 31 March - entire country Vaccination discontinued from 1 April 1991	1 million doses 0AC trivalent produced locally	National contingency plans conform with EEC Directive
Bulgaria	1991 - no vaccination	Emergency FMD ring vaccination only in the area of the outbreak. Cattle: 44,895 Sh/goats: 6,542 (August 1991)	Vaccine banks under discussion with European vaccine producers	National contingency plans include strict sanitary measures, stamping out and ring vaccination
Cyprus	No vaccination since 1985	-	Negotiating with International Bank, Pirbright, UK.	National contingency plans conform with FA0 plans

VACCINATION PROGRAMMES				
Country	**Species vaccinated**	**Period of vaccination**	**Strategic reserve of vaccine (bank)**	**National contingency plans**
Czech and Slovak Federal Republic 1991 1992 Czech Republic Slovak Republic	All cattle above 3 months; adult sheep, goats and sows 1991: Cattle: 1,880,000 Sheep: 75,000 Pigs: 513,000 Goats: 500	Vaccination discontinued as of 1 September 1991	1,300,000 doses stored at Bioveta, Terezín, ready for use	In line with EEC rules - under preparation
Denmark	Total prohibition of vaccination as of 1 January 1977	-	National bank of concentrated, frozen antigen, 800,000 doses of each of the European types 0, A and /C. Stored at the State Veterinary Institute for Virus Research.	Revised Contingency Plan submitted to EEC Commission for approval (Art.5.3 Directive 90/423/EEC)
Finland	No vaccination	-	Member of the International Bank, Pirbright, UK.	National contingency plans for FMD conform with FA0-EEC plans
France	1991 Cattle: 10,000,000	Until end March 1991 - thereafter vaccination prohibited as of 1 April 1991	National bank of concentrated antigen 01,A5,A22, C and ASIA-1 stored at Laboratoire Pathologie Bovine, Lyon. This will be integrated in the EEC bank. In addition a stock of 300,000 doses of trivalent OAC vaccine ready for use.	National contingency plans prepared in conformity with the Directive 8/511/EEC.

VACCINATION PROGRAMMES				
Country	**Species vaccinated**	**Period of vaccination**	**Strategic reserve of vaccine (bank)**	**National contingency plans**
Germany, Federal Republic of	All cattle above 4 months 1991 - Cattle: 13,000,000	01-01-1991 to 31-03-1991 Vaccination programme discontinued as of 1 April 1991. (Former DDR had already stopped in December 1990)	National FMD vaccine bank was set up with Bayer in Cologne. Virus types O_1-Kaufbeuren,O_1-Dalton 1988 A_5 Bernbeuren, A_{24} Cruzeiro, $A_{81/87}$ Castellanos, A Iran, C_1 Oberbayern, ASIA 1, SAT 1 and SAT 2 (of each type and subtype 100,000 doses respectively of vaccine ready for use and 1 million doses of virus concentrate. The bank is accepting to hold stocks for other European countries.	National contingency plans conform with EEC Directive
Greece	1991 - no vaccination	-	$O_1/A_5/C_1$ 200,000 doses O_1/A_{22} biv.Middle East 200,000 doses	In conformity with EEC
Hungary	1990-1991 - no vaccination	-	Stock of O A C vaccine ready for use (Rhône-Mérieux)	
Iceland	No vaccination	-		
Ireland	No vaccination	-	Member of the International Bank for FMD, Pirbright, UK.	In conformity with EEC

VACCINATION PROGRAMMES				
Country	**Species vaccinated**	**Period of vaccination**	**Strategic reserve of vaccine (bank)**	**National contingency plans**
Israel	Cattle, sheep, goats, pigs and camels 1991 - same policy Cattle:354,000 (9,000) Sheep: 255,000 (93,400) Goats: 30,000 (48,000) Camels: 800	November-February All young cattle, 2 to 18 months revaccinated in May-June	Trivalent vaccine imported; costs more than US$ 600,000 annually	National contingency plans for FMD applied to the local conditions
Italy	-All cattle above 3 months -Cattle not previously vaccinated which have attained 3 months -Cattle vaccinated for first time are vaccinated again within 3 to 6 weeks after first vaccination -Compulsory vaccination of all imported cattle over 3 months -Sheep and goats over 3 months prior to transhumance 1991 Cattle: 6,650,700 Sheep: 6,750,000	From 1 April to 31 May 1991 and from 1 June to 10 August 1991 As of 10 August 1991 vaccination suspended in the entire country	FMD vaccine bank is held at the Brescia FMD Institute designated as vaccine storage Centre for FMD vaccine for the European Community	National contingency plans prepared in conformity with Art.5 of the EEC Directive 90/423
Luxembourg	All cattle above three months of age 1991 Cattle: 180,000	From 1 December to 31 January Vaccination discontinued as of 1 April 1991	25,000 doses of $0_1/A_5/C_2$ trivalent vaccine	In conformity with EEC Directive

VACCINATION PROGRAMMES				
Country	**Species vaccinated**	**Period of vaccination**	**Strategic reserve of vaccine (bank)**	**National contingency plans**
Malta	1991 - no vaccination	-	Negotiating with International Bank, UK and Brescia Institute	In conformity with EEC Directive
Netherlands	1991 Cattle: 3,760,000	From 1 December to 28 February Vaccination discontinued as of 1 March 1991	Production of 4,000,000 doses A0C concentrated antigen stored in a national bank at Lelystad designated by EC for production & storage of FMD vaccine in the Community and as Reference Centre for vaccine control in the EC.	Present contingency plans for FMD are under review; updated contingency plans will be ready at the beginning of 1992
Norway	No vaccination	-	Member of Int. Vaccine Bank, Pirbright, U.K.	Contingency plans at national, regional and local level; plans being tested by simulating FMD outbreaks
Poland	No vaccination	-	No information	No information
Portugal	Cattle: compulsory vaccination above 3 months Sheep/goats:not compulsory 1991 Cattle: 230,591 Pigs: 4,269	Once a year, when necessary twice a year Vaccination discontinued as of 1 July 1991	Contract with vaccine producer for vaccine bank	National contingency plans in conformity with EEC Directives

VACCINATION PROGRAMMES				
Country	**Species vaccinated**	**Period of vaccination**	**Strategic reserve of vaccine (bank)**	**National contingency plans**
Sweden	No vaccination		Member of the International Vaccine Bank, Pirbright, UK	National contingency plans conform with EEC-FA0 plans
Switzerland	1991 - no vaccination as of spring 1990	-	Contract with Rhône-Mérieux for stockage of concentrated antigen for 300,000 doses of vaccine types A5,C1,01 and ASIA-1	National contingency plans for FMD conform with FA0 and EEC
Turkey	A. Turkish Thrace - no vaccination B. Anatolia - new buffer zone Marmara area, cattle twice a year, sheep once a year in the other provinces and ring vaccination around the foci 1991 Cattle: 5,864,956 Sheep: 8,281,336	All year round	Bivalent or trivalent 0,A22 C, vaccine produced at the SAP Institute, Ankara, ready for use	No information
United Kingdom	Vaccination not permitted	-	Member of the International FMD Vaccine Bank, Pirbright and the EEC FMD Bank	Contingency plans for FMD have been drawn up in accordance with Art.5 of Directive 90/423 of EEC Commission

VACCINATION PROGRAMMES				
Country	**Species vaccinated**	**Period of vaccination**	**Strategic reserve of vaccine (bank)**	**National contingency plans**
Yugoslavia (last information received in 1991)	Cattle for export above 7 months	Vaccination discontinued except of live animals for export at the request of the importing country	No information	No information
Romania	1991 Cattle: 992,100 Sheep: 1,398,500	Twice a year (6 months interval); young cattle are revaccinated after 15-21 days Vaccination discontinued as of 1 November 1991	Stock of A/O/C vaccine at the National Institute ready for use	In conformity with FA0 and EC
Federation of Russia & new Republics	Cattle above 4 months Sheep and goats above 1 month, pigs above 2 months 1991 Cattle: 114,376,600* Sheep: 50,632,200* Pigs: 2,217,300* *doses of vaccine used - not numbers of animals vaccinated	Spring and autumn No information	No information No information	No information No information

Appendix 4

Report on FMD in Italy until 22 April 1993

INTRODUCTION

Foot and mouth disease has reappeared in Italy after almost 4 years, but with some differences. The present epidemic is infact due to an exotic strain (type O MANISA), probably originary from the Middle East. This strain is characterized by a 30 % omology with the O type which struck Italy in the past years.

As in the past the disease has spread very quickly in all the involved regions, which, unlike those ones victims of the previous epidemic, are all localized in the South of Italy except for the Veneto region which belongs to the Northern part of the country.

The epidemiological investigation carried out in order to determine the origin of the disease have not yet achieved any positive result. It seems, anyhow, that FMD has penetrated in our country through the importation of cattle with sanitary certificates released bt the Republic of Croatia. The imported animals were not necessarily to be sent to slaughter-houses. These cattle are arrived in Italy, using different ways: some of them travelling via terra and crossing the border at Prosecco, some others were shipped and landed in the Bari harbour. The animals, once nationalized, were sent to their buyers, mainly halting sheds in some Southern regions (Basilicata, Campania); later these importers sold the cattle to other farmers, living in the South of Italy, except for one farmer belonging to the Roverchiara district, in the province of Verona which is in the North-Eastern part of the country.

FMD OUTBREAKS IN ITALY DURING THE PERIOD 02/22/1993-04/22/1993

The first outbreak has been suspected in the Sarconi district (PZ), Basilicata region, on the 22nd of February. The presumptive diagnosis was made by a veterinarian whom was called by the farmer for some problems, seemingly affecting the respiratory tract. This farmer had introduced some cattle from the GAM firm, which had imported some cattle from Croatia.

54 outbreaks have been suspected in the period 02/22/1993-04/19/1993. 25 of them were in the Basilicata region, 11 in Campania, 10 in Calabria, 4 in Puglia and 4 in Veneto.

All the species traditionally receptive to the FMD virus have been struck, but with different severity. Cattle, swine, sheep, goats and buffaloes were infact present in the outbreaks, which have involved on the whole 8100 animals. The two species more frequently involved are the sheep and goats (3893, 48.06 % of all the animals present in the outbreaks), followed by cattle (3225, 39.81), and swine (906, 11.18 %). Buffaloes have been on the contrary less involved in the outbreaks, being only 76 head (0.93%), distributed in two outbreaks: # 4, in the Grumento Nova district (PZ), and # 53, in the Cancello Arnone district (CE).

Moreover it is necessary to consider other animals slaughtered following a suspect of contamination: 603 cattle, 2494 swine and 244 sheep (3341 animals). The total number of the slaughtered animals because of the present FMD epidemic is therefore 11441.

The present epidemic, although due to an exotic strain, has not been basically different, pathogenetically and clinically, from what was observed during the previous years. The clinical signs are the same of those ones described in the abundant literature about FMD: vescicles localized in the mouth, on the feet, and less frequently on teats and mammary glands.
The most sensitive animals have been as usual cattle (274 diseased animals), followed by sheep and goats (114 diseased animals), buffaloes (11 diseased animals) and at last swine (3 diseased animals).

Cattle only were present in 19 out of the 54 outbreaks, while 4 of the outbreaks hosted only sheep and goats. The other outbreaks were farms, with a generally low number of animals (less than 50 animals); animals belonging to all the sensitive species were present in 18 of these farms.

Unfortunately the available data have not made possible to calculate an exact morbility rate, because of the legislative restrictions which make compulsory the slaughtering even following the simple suspect of contamination.

The mortality rate has been 0, inasmuch only one head of cattle died in the first outbreak.

Table 1: animals present in the various regions, provinces and districts involved by the present FMD epidemic.

REGION	NUMBER OF PROVINCES	NUMBER OF DISTRICTS	ANIMALS PRESENT IN THE OUTBREAKS CATTLE	SWINE	SHEEP-GOATS	BUFFALOES
BASILICATA	2	17	347	792	3476	8
CAMPANIA	3	11	106	27	47	68
CALABRIA	2	8	238	89	235	0
PUGLIA	1	3	76	0	3	0
VENETO	1	2	2458	0	6	0
ITALIA	9	41	3225	908	3893	76

PRELIMINARY EPIDEMIOLOGICAL REMARKS

Epidemiological investigations are being carried out and they have presently enabled us to identify the following clusters:

cluster 1 (GAM): 8 outbreaks belong to this cluster; all of them broke out in the Potenza province and they are supposed to be connected to the importation of cattle from the ex-Jugoslavia in various dates, last of which being on the 6th of February. Assuming an incubation period similar to those ones reported in

literature (range 2-15 days, more frequently 7 days) we consider reasonable that the infection is penetrated only with the batches imported on the 28th of January or on the 6th of February.

cluster 2 (Piano Bros.): 7 outbreaks belong to this cluster, all of them in the Avellino province.

cluster 3 (BASILBEST): 25 outbreaks belong to this cluster, and they verified themselves in all the regions involved in the present FMD epidemic. BASILBEST had introduced cattle from ex-Jugoslavia on the 15th of February and on the 1st of March. Considered the dates in which the secondary outbreaks connected with the BASILBEST arose, we think reasonable that the infection has been introduced through the batch of cattle imported on the dates previously quoted.

cluster 4: 5 outbreaks belong to this cluster, all of them in the Basilicata region. They are connected because all the farmers of this cluster introduced animals using the same truck-driver.

As far as the clusters 2 and 4 are concerned, satisfying data are not yet available, especially regarding means and times of the penetration of the FMD virus in Italy. In particular the legal and commercial documents are particularly few and contradictory in the case of the primary outbreak of cluster 2.

Presently it is not possible to identify any certain connection for the remaining 9 outbreaks, 8 of which were reported in the period 03/20/1993-04/08/1993.

From a preliminary analysis of the available data it is clear the epidemiological role played by some cattle dealers, both in the introduction and in the later diffusion of the epidemic on the Italian territory. The most important among these importers is surely the BASILBEST, which is a halting shed, allowed to import, in the Policoro district (MT). This firm serves many customers, covering all the regions involved in the present FMD epidemic. BASILBEST connects most of the outbreaks, 14 of which are directly related to it; the remaining 10 ones have been inserted in this cluster because they are or adjacent to the 14 secondary outbreaks or they have commercial relationship with these ones.

Another cluster particularly important is # 1, identified as GAM (from the name of the cattle dealing firm, outbreak #2). The first 7 outbreaks of this cluster are connected by various factors: acquisition of animals from the GAM, the same veterinarian, whom was called by the owner of the 1st outbreak because of apparent respiratory problems in the animals bought from the GAM; in the following days this veterinarian visited others farms; narrow spatial and commercial relationship among several farms of the area; traditional farming techniques (little farms with a few animals, wandering pastures, transhumance and so on).

From a preliminary analysis it is clear that most of the outbreaks belonging to the clusters already described are caused by the movement of animals probably infected: 27 (64.28 %) out of 42 secondary outbreaks, while 9 farms were struck because of

their adjacency to other infected farms (distance always less than 500 m). The remaining 6 outbreaks (14.28 %) have been caused by other factors, such as a more or less close kinship with the owners of other infected farms or the sharing of economical interests.

TEMPORAL COURSE OF THE FMD EPIDEMIC

9 outbreaks were reported in the period 02/22/1993-03/10/1993, 41 in the period 03/11/1993-03/27/1993 and 4 in the period 03/28/1993-04/22/1993 and the last of these ones in date 04/22/1993.
Almost all the outbreaks have been suspected and reported in the period 03/11/1993-03/27/1993, during which the cluster BASILBEST was discovered. This confirms the extremely important role played by this firm during the FMD epidemic. It could also indicate that the epidemic is in the terminal stage.

ADOPTED MEASURES

As soon as FMD has appeared in Italy, the Authorities have set up an immediate intervention, according to the current legislation: D.P.R. 03/01/1992 n.229, enforcing the EEC directive 85/511/EEC, which fixes the control measures to be adopted during a FMD epidemic, considering the changes brought by the directive 90/423/EEC.
On the 10th of March the Minister of Health has signed an ordnance which makes compulsory the veterinarian control prior to the movement of FMD-sensitive animals out of the district territory.
Since the 12th of March 1993 all fairies, markets, exhibitions, and every kind of concentration of animals receptive to FMD have been prohibited in order to avoid the spread of the disease.

This prohibition is still in force and the competent Department of Public Security of the Home Office has been urged to intensify the controls on every movement of FMD-receptive animals.
On 03/19/1993 the Regions have been invited to adopt eventual integrative measures, to be added to those ones already adopted by the Central and Local Health Authorities.
The Minister of Health, availing himself of the article 2, paragraph 2, Law 06/02/1988 n.218, has made compulsory the slaughtering of the animals suspected to be contaminated.
Other adopted measures are the restrictions regarding the importation of FMD-receptive animals from Croatia (03/02/1993); these measures have later involved all the territory of ex-Jugoslavia, comprising also products of animal origin and still later (03/08/1993) the restrictions have been applied also to other Eastern Europe countries (Hungary, Bulgary and Czechoslovakia).
On the 9th of April the EEC has decided to block all the importations of animals and relative products from Eastern Europe.

When an outbreak is suspected, the farm is put under sequestration and every movement is blocked; if the suspect is confirmed, on a laboratory or clinical basis, all the animals

sensitive to FMD present in the outbreak are slaughtered and destroyed. The Health Authorities define the zone of protection and of surveillance, and in these areas all the present animals are counted, their movements are blocked during a period lasting 15 days from the disappearance of the last outbreak.
Epidemiological investigation are carried out by the veterinarians working in the LSU in whose territory FMD has appeared in order to determine the origin of the disease.
During the present FMD epidemic the Government has activated a Crisis Unit in which various experts have worked; they came from several public institutions such as the IZS, EEC and from the National Reference Center for Vescicular Diseases, besides to the LSU and regional veterinarians. The Health Department has been helped in the elaboration of the information by the National Reference Center for Epidemiology.

ECONOMICAL LOSSES

The economical losses comprise various kinds of damages. In particular we are going to calculate the financial losses due to the payment of the indemnities, which must be paid to the farmers. This sum is totally anticipated by the Italian Government, but it is actually at the charge of EEC (70 %) and of Italian Government (30 %). In the following table we report the indemnities distributed per species and relative number of head.
The indemnities are calculated in the following way: L.3.000.000 per cattle head, L.1.800.000 per buffaloes, L.400.000 per swine and L.200.000 per sheep and goat.

ECONOMICAL DAMAGES IN ITALY

The accompanyng table contains estimated costs calculated only for remboursements to the owners of shot and destroyed animals in outbreaks (£ 13.808.202.000 that is about 7.424.000 ECU) .
To this soum must be added costs related to extraordinary measures of profilaxis, that is thorough disinfections and destructions of carcases of animals present in the outbreak . these costs are about £ 5.000.000.000 that is 2.688.000 ECU .
It is of course impossible to calculated at the moment all the indirect costs caused by tha presence of the disease in a certain area and in the whole country . These are the costs related to slowing-up or complete blocking of productive activities and commerce in general . Also the suspenction of markets, animal exibitions and fairs causes economical losses to the operators, as price fluctuations caused by absence of a market-fixing .
Another cause of economic losses is the block or slowing-up of the importation of breeding or fathening animals from EEC and non EEC countries, and exportation of animals products .
Other costs are caused by commercial promotion to sustain , as in the country as abroad , all productions related to the disease , to give a correct information about the sanitary risks .
So we can say that the "true" cost of the recent epizooty is about 10 times the eximed one only related to owners compensation and disifections, reaching the sum of £ 188.000.000.000 (101.675.000 ECU) .

We only want to mention here that during the "vaccinating era" , the costs for the state was only £ 23.000.000.000 per year . This does not mean that we want to go back to the past , but the whole matter should be reviewed also evaluating the damages caused by the introction of the disease in a member state with a high-density of sensible animal population .

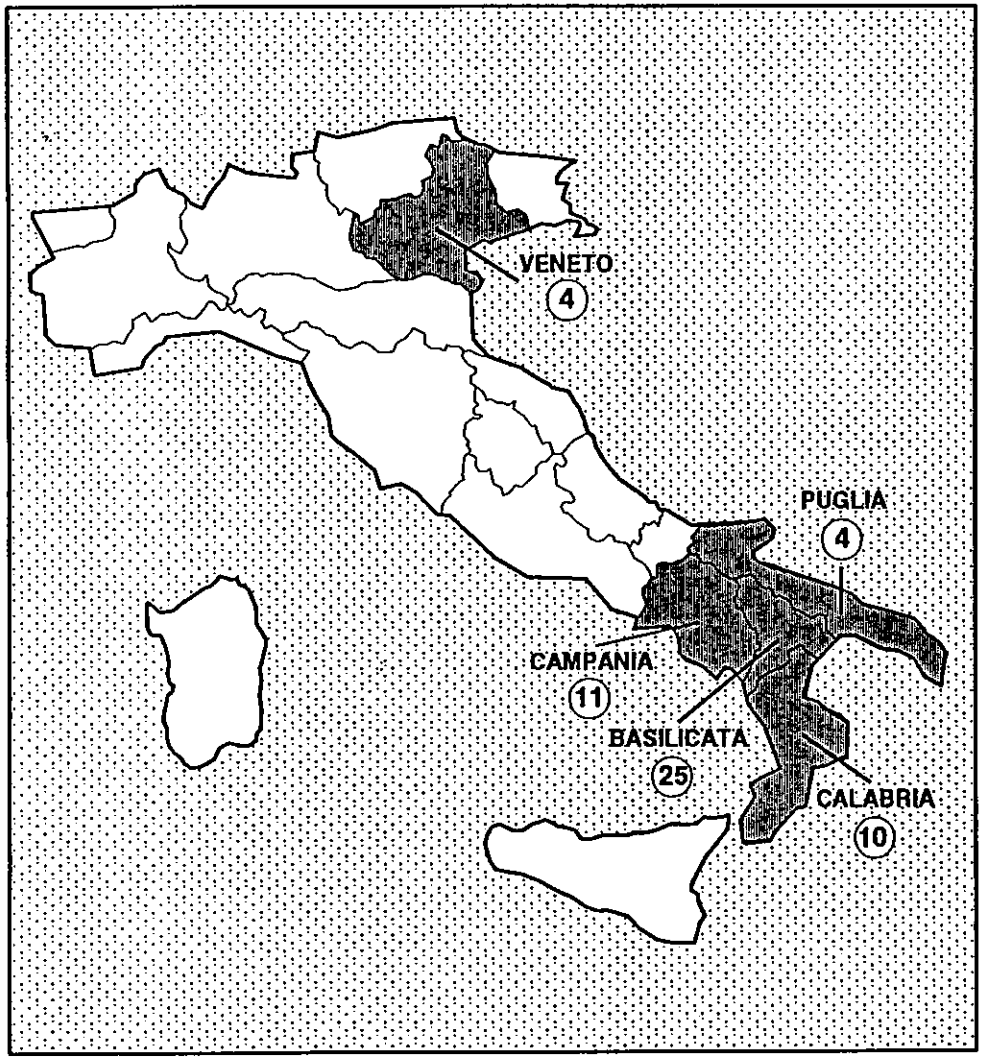
SPECIES	Slaughtered animals		Total slaughtered animal	Total indemnities
	outbreaks	suspect of contamin.		
CATTLE	3225	603	3828	11484000000
BUFFALOES	76	0	76	136800000
SWINE	906	2494	3400	1360000000
SHEEP	3247	244	3491	698200000
GOATS	646	0	646	129200000
TOTALE	8100	3341	11441	13808200000

CONCLUSIONS

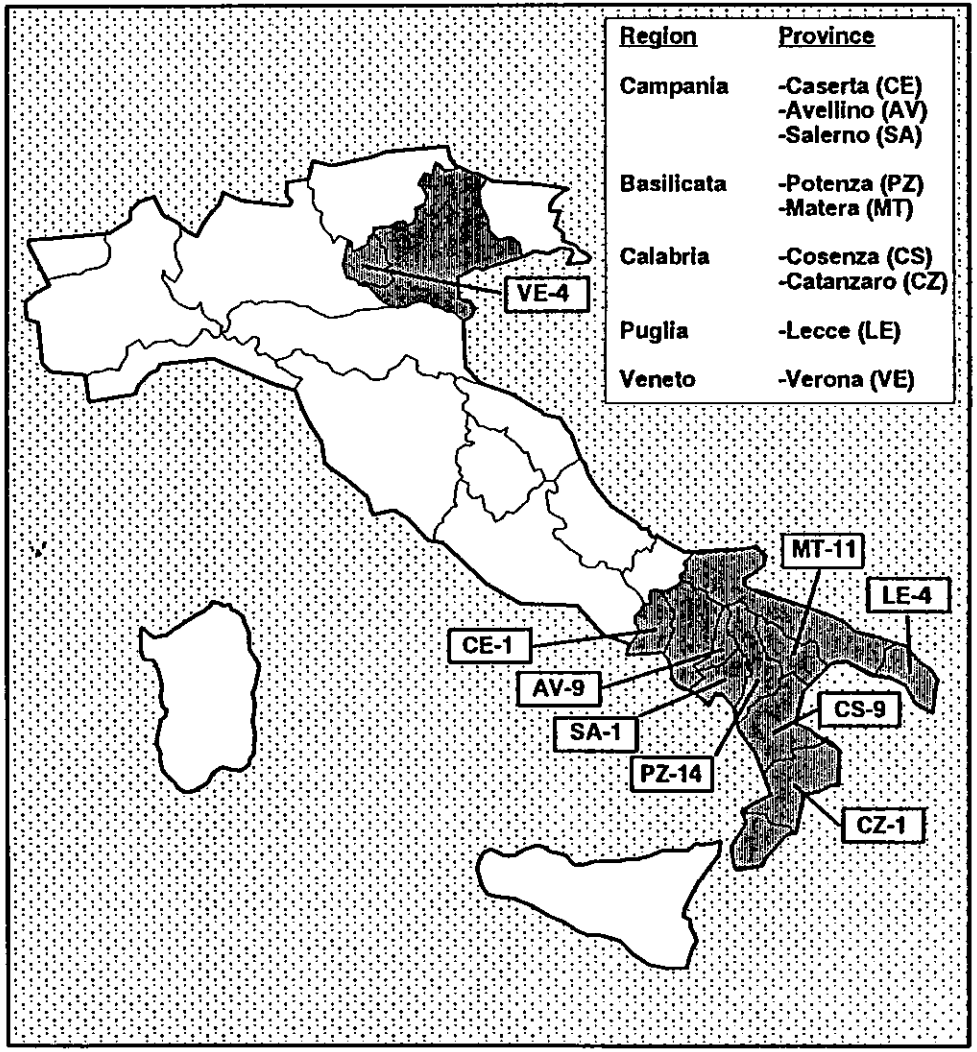
Since July 1989 no outbreak of FMD has been present in Italy.
The Ordnance of the Minister of Health 08/05/1993 has forbidden the vaccination anti-FMD.
On the 22nd of February 1993 FMD has reappeared in our country in a farm which had bought cattle from a country foreign to the EEC.
The disease has found in our country a population totally receptive to the epidemic sustained by an exotic strain, and therefore FMD spread itself very easily.
The measures adopted by the Health Authorities have delimited the epidemic with great efficacy, greatly reducing the direct economical losses, and all this has been achieved in quite a short period of time.
The last outbreak was reported on the 21st of April. All the measures usually adopted during a FMD epidemic are still in force.

LOCATION & NUMBER OF FMD OUTBREAKS IN ITALY

Till 22 April 1993 - Distribution by Region



Till 22 April 1993 - Distribution by Province.



Appendix 5

Activities of the Research Group 1991/1992

The Research Group of the Standing Technical Committee held two Sessions during the period under review: at the FMD Institute, Ankara, Turkey from 1 to 5 October 1991 and at the Institute of Virology and Immunoprophylaxis, Mittelhäusern, Switzerland from 8 to 11 September 1992. The conclusions and recommendations of these Sessions have been published in the relevant reports which have been distributed to all members of the Commission and to the International Organizations and National Institutes concerned.

A brief summary of the proceedings of both Sessions follows.

SAP (FMD) Institute, Ankara, Turkey, 1 to 5 October 1991

This Session provided an opportunity for members of the Group and observers to meet Turkish colleagues from the laboratory and state veterinary service and to see the SAP Institute. The scientific session was held at the SAP Institute. The main items presented were under the following headings:

1. Recommendations for FMD contingency plans including emergency actions in and around FMD infected premises in non-vaccinating countries.

   This paper was prepared in response to a request from the Commission following discussions at the Twenty-ninth Session of the Commission in April 1991 about future policies for the control of FMD in Europe, in particular the cessation of prophylactic vaccination. The paper was reviewed by the Group who recommended a number of amendments. It was agreed that Section 5 should be included as an Annex under the title "Emergency actions in non-vaccinating countries". The Group also identified the criteria which need to be considered before strategic ("ring") vaccination is employed as an adjunct to stamping out.

   The revised paper has since been amended by the OIE FMD and other Epizootics Commission and the FMD Subgroup of the EC Scientific Veterinary Committee.

2. Review of security requirements for laboratories working with FMD virus

   The FMD Subgroup of the EC Scientific Veterinary Committee has extensively revised the FAO document "Minimum standards for laboratories working with FMD virus *in vitro* and *in vivo*". The Group reviewed the document and proposed some further amendments. In the meantime the paper has been amended by the OIE FMD and other Epizootics Commission and adopted by the FMD Subgroup fo the EC Scientific Veterinary Committee.

3. Further information about the stability of FMD vaccines prepared from stored antigen

   No paper specific to this topic was given but a paper reporting the antigenic variability of type C FMD viruses over six decades was presented by Dr E Domingo (Spain). Evidence was provided showing two major patterns of antigenic variation: (i) a gradual increase of divergence in VP1; and (ii) an abrupt antigenic change in VP1. On the basis of these changes the Group recommended a careful selection of type C strains for vaccine banks and that similar analyses should be extended to FMDV strains of serotypes A and O.

4. Guidelines for importation into Europe of live animals, meat and offal

This paper was prepared in response to the Commissions request that recommendations discussed at the Twenty-ninth Session in April 1991 be further reviewed taking into account the non-vaccination policy adopted in Europe. The Group discussed the paper and agreed further amendments.

5. Epidemiology of recent FMD outbreaks in Turkey and characteristics of field isolates with reference to both cattle and small ruminants

Papers were presented giving results of the serotyping of isolates from field outbreaks in Turkey during 1990 and 1991 (up to June) obtained at the SAP Institute and at the WRL, Pirbright. Results were also presented of serological surveys in Anatolia carried out during 1991 by the SAP Institute. The Group noted that an estimated 70% of the animal population in the Strategic Vaccination Zone (SVZ) is vaccinated and in the rest of the country the coverage is 30%.

The Group recommended that a higher vaccination coverage should be achieved and that a greater number of field samples be sent for examination in Ankara and Pirbright.

Considering the number of outbreaks in the SVZ, the Group recommended that stricter measures should be taken to control animal movements.

In addition, the Group recommended that a further serological survey be carried out in the Thrace area as soon as possible, taking into account the presence of recently vaccinated animals in a zone near the Bulgarian border.

6. Results of the Ankara/Pirbright FMD vaccine trial in cattle

The results of a cattle potency trial carried out with O_1 Manisa vaccine produced and tested at the SAP Institute, Ankara were presented. The vaccine failed to protect any vaccinated cattle against the homologous challenge with O_1 Manisa and consequently the proposed follow-up heterologous challenge test was cancelled. The Group noted that the conditions under which the animals were housed for the challenge test were unsatisfactory and concluded that these might have influenced the results. The Group recommended that one or more batches of antigen produced at the SAP institute for use in the 1992 Spring vaccination campaign should be selected for repeat testing.

The Group recommended that important kinetic parameters of antigen production be carefully monitored and optimised to improve vaccine quality at the SAP Institute.

7. Follow-up discussion on the carrier state

The Group reviewed the recommendations of 1977 and agreed that they were no longer valid and new ones should be drawn up based on the recommendations agreed at the 1990 session of the Group. The Group agreed that further discussions were required at the next session before final recommendations can be made.

8. Visit to the SAP Institute

The Group visited the SAP Institute and saw the vaccine production facilities, the large animal accommodation and the diagnostic laboratory. They discussed technical aspects of the work with the staff and gave advice on various ways for improving procedures.

The Group agreed that there is urgent need to provide technical assistance to the SAP Institute on a full-time basis.

9. Recent FMD outbreaks

The Group was given details of investigations to determine the origin of the 1991 Bulgarian outbreak. Laboratory results identified the Bulgarian isolate as being a Middle East type O_1 strain but epidemiological investigations failed to establish how infection entered Bulgaria. The Group stressed the need for free exchanges of information on current field isolates between laboratories, in particular from the WRL.

The Group was also given data about recent outbreaks of type O_1 in Morocco. The Group recognised the serious threat posed to Europe by the continued presence of FMD in North Africa.

10. Election of Chairman

Dr Alex Donaldson (UK) was elected to succeed Dr Morten Eskildsen (Denmark) as Chairman. The excellent contribution made by Dr Eskildsen during his six years of office was acknowledged by the in-coming Chairman and Members of the Group.

Institute of Virology and Immunoprophylaxis, Mittelhäusern, Switzerland, 8 to 11 September 1992

The main items on the agenda were:

1. Persistence of FMD virus in ruminants including game animals
2. Potency and stability of FMD vaccines prepared from stored antigens
3. Results of FA0 Collaborative Study (Phase XII)
4. Improved and new techniques for the diagnosis of FMD
5. Differentiation of antibodies induced by vaccination and by infection; development of an assay for VIAA
6. Items referred by the Commission to the Group

The main points under these items were:

1. Persistence of FMD virus in ruminants including game animals

Nucleotide sequencing of FMDV isolates obtained by probang sampling from buffalo in Southern Africa is proving to be a useful technique for studying the epidemiology of the disease in Africa and the evolution of the virus. Extensive variation occurs within both SAT 1 and 2 viruses circulating in buffalo, even in relatively small

geographic areas. Each locality has its own group of viruses. Experimental studies with animals in captivity in a game park showed the transmission of SAT 2 virus from carrier buffalo to susceptible in-contact cattle and buffalo.

The Group discussed the recommendations of the 1977 and 1990 Research Group meetings on the importance of FMD virus carrier animals. Amendments were made to them, but it was emphasised that it was not possible to make any final recommendations as further research is required, particularly on small ruminants.

2. Potency and stability of FMD vaccines prepared from stored antigens

Papers were presented recording the immunising activity of vaccines formulated in different preparations from stored antigen. The data showed that double oil emulsion (water/oil/water) can give rapid and long lasting immunity and that oil emulsion vaccines can be successfully used in cattle, pigs and sheep. It was recommended that this type of adjuvant formulation should be available for use in emergency Vaccine Banks.

3. Results of FA0 Collaborative study (Phase XII)

Eleven laboratories provided results which evaluated the FMD antibody ELISA in routine use against panels of reference sera provided by the WRL. It was concluded that Phase XII demonstrated the feasibility of standardising assays by reference to a panel of standard sera.

Provided problems related to the stability of standardised, inactivated lyophilised antigens could be overcome, both reference sera and antigens will be provided for the next phase.

4. Improved and new techniques for the diagnosis of FMD

A series of papers were presented giving details of developments for improving diagnostic techniques. Several papers demonstrated the usefulness of the polymerise chain reaction (PAR) method. This and other molecular biological techniques are improving our understanding of the epidemiology of FMD virus. A finding of practical significance has been the identification of two serotype of FMD virus in field samples received from endemic areas (Saudi Arabia and Asiatic Turkey).

5. Differentiation of antibodies induced by vaccination and by infection: development of an assay for VIAA

Presentations under this heading recorded different approaches to the problem of developing reliable procedures for differentiating vaccinated from infected, and carrier from non-carrier convalescent animals.

6. Items referred by the Commission to the Group:

a. Three documents were reviewed by the Group:

i. Security Standards for FMD Laboratories;
ii. Recommendations for FMD contingency plans including actions in non-vaccinating countries; and
iii. Minimum conditions for the importation into Europe of live animals, fresh meat and offal of the bovine species.

The Group agreed some alterations and requested that the papers be forwarded to the Executive Committee and General Session and that the Secretary should ensure that the international bodies who have contributed should be fully acknowledged.

b. **Serological survey in Thrace**

The Group discussed and agreed the conclusions in the paper. The Group recommended that:

i. All the sera collected in the survey be assayed for antibodies to FMD virus serotype A_{22}.
ii. Further serum samples be collected as soon as possible from areas in which positive samples had been found and in areas which have not been sampled where there is a high level of animal movement and which had not been previously sampled.
iii. Regular serological surveys be undertaken in Thrace.
iv. Whenever available, wildlife serum samples should be examined for the presence of antibody against FMD virus.

c. **Request from OIE to join the FA0 Collaborative Study**

The Group declared its support for the proposal, and it was agreed that the Chairman should approach the 0IE to ascertain their specific intentions.

d. **Future activities of the Research Group**

The Group reviewed its activities with regard to the threat to Europe from FMD and urged that it continue to provide technical and scientific support by:

i. maintaining surveillance of FMD in countries bordering Europe;
ii. providing advice on the selection of vaccine strains and the establishment of Vaccine Banks;
iii. advising on the use of vaccines in outbreaks of FMD; and
iv. characterising outbreak strains of FMD viruses.

Visit to Institute of Virology and Immunoprophylaxis

Professor U. Kihm, Director, IVI, Mittelhäusern, described the design and function of the new laboratory and its scientific objectives. The Group and visitors were taken on a conducted tour.

A.I. Donaldson, Chairman, Research Group

Appendix 6 (i)

NATIONAL CONTINGENCY PLANS

RECOMMENDATIONS FOR FMD CONTINGENCY PLANS INCLUDING ACTIONS IN NON-VACCINATING COUNTRIES

1. Legal powers
2. Financial provisions
3. National disease control centres
4. Local disease control centres
5. Expert teams
6. The sources required for disease emergencies (Personnel)
7. The resources required for disease emergencies (equipment and facilities)
8. Instructions for dealing with FMD outbreaks
9. Diagnostic laboratories
10. Contingency plans for vaccination
11. Training
12. Publicity - disease awareness

26.02.93

SECTION 1 - LEGAL POWERS

1.1 Each country should have legal powers to ensure that a campaign against FMD is rapidly and successfully concluded. The legal powers should be clearly understood by all involved with disease control and should be described in the instruction manual for dealing with FMD outbreaks (see Section 8).

1.2 The legal powers should encompass :

- the compulsory notification of any suspected case of FMD,
- authority to collect samples for laboratory investigation,
- the killing of infected and contact animals,
- the payment of compensation,
- zoo-sanitary and other procedures on infected premises,
- the control of movement and other restrictions (including the designation of protection and surveillance zones),
- emergency vaccination.

SECTION 2 - FINANCIAL PROVISIONS

2.1 Each country should ensure that it has provision for access to emergency funds and the budgetary powers and financial resources to cover the cost of dealing with all aspects of an FMD epidemic.

The main areas of expenditure are :

- the cost of personnel over and above normal running costs,
- the cost of capital equipment and consumable items,
- the cost of killing, disposal of carcasses/contaminated material and zoo-sanitary measures,
- the cost of compensation payments to stock owners,
- the cost of emergency vaccination.

2.2 The farming community can be expected to co-operate only if valuation is fair and compensation for killed stock is paid promptly. National authorities should endeavour to ensure that payments are made no later than 60 days after the killing of stock.

SECTION 3 - NATIONAL DISEASE CONTROL CENTRES

3.1 Each country establish a permanent DISEASE CONTROL CENTRE at the national level. In the event of an outbreak of FMD the centre should co-ordinate all control measures within the national territory. Although the centre is established primarily for the control of FMD, the facilities may also be used for the control of other List A diseases.

3.2 The centre should be in proximity to the office of the Chief Veterinary Officer (CVO) who is ultimately responsible for the co-ordination of all control measures. The CVO may delegate day-to-day responsibilities in this area to a veterinarian designated as the head of the control centre.

3.3 The National disease control centre should be kept in a state of readiness for a disease outbreak. Its main task is to direct and monitor the operations of the local disease control centre or centres and the responsibilities include :

- the overall direction of control strategies,
- the deployment of staff and other resources to local centres,
- the provision of information to OIE and FAO and to neighbouring countries, to national agricultural and trading bodies and to the press and other media, the release of vaccine for use within the country and the determination of vaccination zones,
- liaison with the national diagnostic laboratory.

3.4 The Centre should be equipped with :

- all suitable means of communication including telephones, telex, data lines, and telefax; facilities for the press are desirable,
- maps covering the area of the country (preferably at 1:50,000 scale),
- lists of national organizations which will be affected by and must be contacted in the event of disease outbreaks (e.g. AI organizations),
- lists of staff and other persons who can be called upon immediately to serve at local disease control centres or in Expert Teams in the event of a disease

outbreak. These lists should record practical experience or training in the control of List A diseases and language abilities.

3.5 The staffing of a National disease control centre is dealt with in Section 6.

SECTION 4 - LOCAL DISEASE CONTROL CENTRES

4.1 Each country should establish one or more Local disease control centres which may be the existing local veterinary offices. The number and location of the centres should be such that staff operating out of a centre can easily reach any livestock holding within the area under its control and return to the centre within a day. In those countries which have a small land area the national centre may also serve as the local centre.

4.2 The National disease control centre should maintain a list of Local disease control centres and for each the name of the veterinarian in charge, the address of the centre, its telephone, telex, data lines, and telefax number and a map showing the area under its control.

4.3 In the event of a disease outbreak a temporary disease control centre may be set up that is convenient to the location of the infected premises. This centre should preferably be within the surveillance zone surrounding the primary outbreak.

4.4 The local centres should be under the charge of a veterinarian who is directly responsible to the veterinarian at the National disease control centre. All staff allocated to a centre for the period of the disease emergency should be under his/her *de facto* command. He/she should have the necessary authority to:

- designate a holding as an "infected premises" (after consultation with, and the sanction of, the National disease control centre if that is considered necessary).
- deploy the necessary staff and equipment to infected premises,
- arrange valuation and slaughter of infected and contact stock, the disposal of carcasses and contaminated material and zoo-sanitary procedures,
- advise on the delineation of protection and surveillance zones and the measures to be taken within them,
- impose movement restrictions within the protection and surveillance zones; close markets and abattoirs as necessary,
- liaise with police and other authorities over the nomination of infected

premises and to maintain these movements and other restrictions.

4.5 Local disease control centres, whether permanent or temporary, should be equipped with :

- adequate telephone, telex, data lines, and telefax communications. At least one line should be reserved for communication with the national disease control centre,

- record systems; preferably these should be computer-based,

- maps covering the territory overseen by the centre (1:50,000 and if possible 1:10,000),

- lists of persons and organizations in the area covered by the centre who must be contacted in the event of a disease outbreak. These will include :
  * abattoirs,
  * artificial insemination organizations,
  * milk cooperatives and dairies,
  * local authorities responsible for control measures,
  * police,
  * customs,
  * other official services likely to visit farms,
  * markets and auctioneers,
  * private veterinarians,
  * livestock and meat hauliers,
  * animal disposal contractors,
  * livestock valuers,
  * feed suppliers,
  * rodent control companies,
  * local veterinary associations,
  * hunting and shooting organizations; race tracks,
  * slaughterhouses and meat processing plants,
  * farmers union,
  * telephone companies,
  * local environmental health and waste disposal authorities

- contingency plans for all major abattoirs,

These lists should be kept up to date and a notification procedure established.

- facilities for informing the press and other media so that all persons are fully aware of the restrictions in force,

- equipment stores (see Section 7),

- facilities for cleaning and disinfecting personnel, clothing and vehicles.

SECTION 5 - EXPERT TEAMS

5.1 The prompt identification of the source and the possible consequences of a primary outbreak of FMD is crucial to the rapid eradication of the disease. Expertise in dealing with FMD outbreaks is already becoming scarce and all countries are recommended to create one or more Expert Teams that can provide a nucleus of expertise. The teams should be alerted when disease is first reported and deployed in the field as soon as it is confirmed. The staffing of these Expert Teams is dealt with in Sector 6.

5.2 The Expert Teams have two main responsibilities :

- to conduct an epidemiological investigation and where appropriate collect samples (epithelium, blood, milk, probangs etc) for submission to the National diagnostic laboratory to determine the extent and pattern of infection,
- through the head of the Expert Team to provide an epidemiological report for the head of the Local or National control centre,
- to advise the head of the Local disease control centre on the advisability of taking of samples (e.g. milk) from contiguous or other herds.

5.3 The epidemiological report from a primary outbreak should describe:

- the situation on the infected premises,
- the number and species of susceptible and other livestock; the method of husbandry,
- the number of clinically affected animals and the age of the oldest lesion(s),
- the size and location of the premises and its relationships with other holdings, public roads, etc.,
- the local meteorological situation unless this is available from a nearby meteorological station,
- the recent movements (livestock and personnel) on and off the holding.

5.4 On the basis of these findings the head of the team should advise the Local or National disease control centre on:

- the possible origin and the date of the introduction of infection,

- the likely period of infection on the premises/holding[1],

- the holdings most at risk from airborne spread or from movements.

5.5 The expert Team should not be responsible for the killing and disposal of stock or for tracing movements on and off the infected premises. These tasks are the responsibility of the Local disease control centre. However, countries may wish to consider including experts in zoo-sanitary measures and carcass disposal in their teams so that they can advise disease control centres on these aspects.

5.6 The team should be provided with sampling equipment (for 250 animals) and communication equipment. Mobile accommodation may be provided and sited just beyond the disinfection barrier outside the infected premises.

5.7 The Expert Team(s) should train staff in FMD control techniques and advise the National disease control centre on the development of new control initiatives.

SECTION 6 - THE RESOURCES REQUIRED FOR DISEASE EMERGENCIES - PERSONNEL

6.1 Experience has shown that the resource factor most critical to effective disease control is a sufficient number of trained and experienced personnel.

6.2 Each National Authority should maintain lists of staff available to deal with a disease emergency. The lists (to be held at the National disease control centre) should identify:

- the name and location of the staff members,

- qualifications e.g. veterinarian,

- practical experience of List A diseases (specifying the disease),

- language abilities - in the event of a call for assistance from another country,

- training undertaken (see Section 11).

6.3 If some personnel are not under the direct control of the Chief Veterinary Officer there should be a firm agreement preferably in writing between the Chief Veterinary Officer and the employers of such personnel for their immediate release.

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[1] "premises/holding" includes a village or area of transhumance activity.

6.4 National Disease Control Centres

The veterinarian in charge of a National disease control centre would have at his/her command veterinarians and other staff who have been trained in the management of diseases emergencies (see Section 11).

6.5 Local Disease Control Centre

The staff at Local disease control centres should include :

- Senior Veterinarian in charge,
- veterinarians trained
  * in the diagnosis of FMD
  * in slaughter, zoo-sanitary and other procedures at infected premises,
  * the operation of movement controls and other restrictions,

- support staff who are trained in
  * the procedures at infected premises,
  * the operation of movement controls and other procedures,

- office staff trained in the maintenance of record systems required for FMD control.

6.6 All staff who are, or may be, allocated to disease control centres should be regularly retrained in disease control procedures and the clinical diagnosis of FMD (see Section 11).

6.7 Expert Teams

Each country should create one or more Expert Teams. The responsibilities of these teams are described in Section 5. Each team should consist of :

- a Senior Veterinarian experienced (or trained) in FMD clinical diagnosis including the ageing of lesions. He/she should also be trained in the epidemiology of the disease.

- a laboratory scientist experienced in laboratory tests for FMD,

- a meteorologist knowledgeable of the weather conditions which may aid the spread of FMD.

6.8 Personnel Resources in the Member State

Each National Authority should ensure that it has immediately available sufficient trained staff to deal with, at any one time, up to 10 outbreaks and to properly maintain surveillance in the 3 Km radius protection zone associated with each. It has

been estimated that a trained veterinarian can visit and examine stock at no more than 5 holdings on one day if he/she properly undertakes the required disinfection procedures at each place.
Note : These scope of activities may need to be modified in some countries according to the local livestock husbandry situation..

6.9 If a National Authority does not have the resources suggested in para 8 above, contingency arrangements should be in place to arrange for deployment from other countries.

SECTION 7 - THE RESOURCES REQUIRED FOR DISEASE EMERGENCIES, - EQUIPMENT AND FACILITIES

7.1 The effective control of FMD depends on the immediate availability of equipment and immediate access to facilities provided by public and private sector utilities.

7.2 Each country should have readily available at Local disease control centres or at some other convenient place at least the following equipment :

- protective clothing,
- disinfectants effective against FMD virus, detergents and soaps,
- pumps, shovels and scrapers,
- humane killers and ammunition, lethal drugs and other approved means of killing animals,
- autopsy and sampling equipment,
- sign post/warning notices for use in infected premises in protection/ surveillance zones,
- maps (1:50,000 and 1:10,000),
- vaccination equipment,
- exhaust air filters for bulk milk tankers.

7.3 The veterinarian in charge of the Local disease control centre should have standing arrangements for access to :

- vehicles,

- combustible materials,
- digging equipment,
- flame guns,
- knapsack sprayers and other means of disinfection.

7.4 Whilst it is preferable to dispose of carcasses by burning or burying them on the holdings, in some situations this may not be possible. If this is so, countries should develop arrangements for transporting carcasses in sealed vehicles to sites for disposal or destruction.

7.5 Each local disease control centre should have available office equipment including:

- office furniture, photocopiers, etc.,
- record systems specifically designed for FMD outbreaks; preferably these should be computer based,
- preprinted proformas such as:
  * formal notices of restriction,
  * valuation,
  * notices for public display,
  * epidemiological reports,
  * tracing requests and reports,
  * movement permits.

SECTION 8 - INSTRUCTIONS FOR DEALING WITH FMD OUTBREAKS

8.1 Each National Authority should prepare a set of instructions (a manual) for dealing with FMD outbreaks.

8.2 The instructions should cover :

The legal basis for

- the notification of suspected FMD,
- the killing of animals, valuation and compensation payments,
- zoo-sanitary and other procedures at infected premises,
- the control of movements,
- emergency vaccination.

8.3 The responsibilities of and the working arrangements for:

- the National disease control centre,
- Local disease control centres,
- the Expert Teams.

8.4 When FMD is reported the action to be taken:

- in the case of a suspected case,
- a case confirmed on clinical grounds only,

- a case fully confirmed (clinical and laboratory tests),
- the submission of material to the National FMD Laboratory,
- the notification of police, local authorities, agricultural associations etc.

8.5 The producers at an "infected premises"

- the isolation of the premises,
- valuation and compensation,
- the slaughter of livestock,
- carcass disposal; contaminated material disposal,
- zoo-sanitary measures (disinfection, decontamination, cleaning),
- restocking.

8.6 Creation of protection and surveillance zones :

- census of all livestock holdings,
- regular surveillance of all livestock holdings,
- movement controls; arrangements with police and other authorities,
- prohibition of AI services, markets, agricultural shows, etc.,
- notices and other publicity,
- handling of milk according to approved procedures.

8.7 Movement tracing

A national Authority should employ a uniform tracing system.

8.8 Equipment and facilities

Arrangements for providing the equipment and facilities detailed in Section 4.

8.9 Epidemiological information

- to be provided by the Expert Teams,
- to be collected at Local disease control centres,
- to be provided to the National disease control centre,
- to be provided to OIE and FAO and neighbouring countries.

8.10 National publicity

SECTION 9 - Diagnostic Laboratories

9.1 Each National Authority should ensure that it has available at all times the services of an FMD diagnostic laboratory either in its own country or elsewhere.

9.2 The responsibilities and duties of National FMD laboratories are:

1. To provide a rapid laboratory diagnosis, especially in initial cases of FMD. (This applies whether or not regular prophylactic vaccination is employed.) An ELISA system of high sensitivity is recommended for diagnosis. The laboratory should keep in stock reference strains of all serotypes of FMD virus including relevant exotic strains (inactivated), and immune sera against the viruses, as well as all other reagents necessary for rapid establishment of an initial diagnosis.

   Likewise, appropriate cell cultures should currently be available for confirming a definitive negative diagnosis.

2. In all suspected primary outbreaks, epithelial samples from vesicles must be collected and packed according to a set protocol. The samples should be quickly transported to the National Laboratory. In anticipation of a possible case of FMD, the appropriate equipment for sample collection and transportation to the National laboratory should be stored in readiness locally.

3. At the earliest possible occasion, the National Laboratory should send a sample of virus from the primary case to the Regional Laboratory and/or World Reference Laboratory (WRL), as appropriate, for confirmation and further characterization (including advice on the antigenical relations of the field strain to vaccine strains).

   Ideally, an aliquot of field material should be sent; if this is not possible, animal passage material, obtained from the original host species, or low cell culture passage material is acceptable. The history of animal or cell passage material should be provided.

4. Representatives from the National Laboratory, the Meteorological Office and the State Veterinary Services, respectively, should currently be prepared to form an epidemiological team for emergency action.

5. The National Laboratory should be equipped and skilled for large scale serological examinations.

6. All laboratories manipulating FMD virus should operate under high security conditions as recommended in the FAO paper "Security Standards for FMD Laboratories".

   The high security systems should be regularly inspected.

7. Members of the field section of the State Veterinary Services should have the opportunity of seeing clinical cases of FMD in the WRL or National Laboratories as part of their training.

9.4 National FMD laboratories must be equipped and skilled for providing a rapid initial diagnosis and also for large-scale serological surveillance.

SECTION 10 - Contingency plans for vaccination

10.1 Emergency vaccination may be introduced when FMD has been confirmed and threatens to become extensive.

10.2 As part of their contingency plans countries should establish or have access to facilities that will allow the prompt provision of vaccine.

10.3 "Cold chain" facilities should be established for the distribution of the vaccine so that it is, at all times, kept under cool temperature conditions e.g. as specified in the European Pharmacopoeia. These facilities should be available:

- at a point where vaccine is delivered to a country for further distribution,
- at or near Local disease control centres for distribution to the veterinarians who will administer this vaccine.

Refrigerated storage and transport facilities should be available which will allow the distribution of the vaccine well within the shelf-life of the product.

10.4 Administration

Vaccination equipment should be held at Local disease control centres or at some other convenient place. Sufficient vaccination needles should be stocked so that each herd can be vaccinated with a fresh unused needle.

Each country should prepare a list of personnel who can be called upon to undertake an emergency vaccination programme. Ideally these persons, if called upon, should have had no recent contact with FMD contaminated material or have visited an FMD infected premises. If they have been in contact with contaminated material or infected premises they should undergo rigorous disinfection including a full change of clothing before commencing vaccination duties.

Before a herd is vaccinated it must be examined by a veterinarian to ensure that the animals are not already showing FMD lesions.

SECTION 11 - TRAINING

11.1 Each country should ensure that staff are regularly trained in procedures for diagnosing and dealing with FMD.

11.2 Training of staff involved in FMD control

National Authorities should arrange for the regular training of all veterinary and support staff who may be engaged in dealing with FMD outbreaks. The training programmes should be led by members of Expert Teams with the support of staff who have experience of FMD. The training programme should include:

- the diagnosis of FMD (video presentations, etc),
- procedures at infected premises,
- procedures at Local disease control centres,
- procedures at National disease control centres,
- tracing exercises, record keeping,
- notification and publicity procedures.

The competence of staff in this area should be maintained by regular training exercises at national and local level. These should include simulated disease control operations.

SECTION 12 - PUBLICITY/DISEASE AWARENESS

12.1 State veterinary services rely on stockowners or on veterinarians attending farm animals to report the possibility of FMD. Reporting needs to be prompt and accurate so that all outbreaks are identified as soon as possible without raising too many false alarms.

12.3 Prompt and accurate reporting can only be achieved if the veterinary profession and stockowners are aware of danger of FMD and are conversant with the signs of the disease. To this end countries should maintain awareness of the disease both within the veterinary profession and in the agricultural community.

The veterinary profession - Material should be aimed at veterinary students and at practising veterinarians. Veterinary schools should be provided with material that is simple but comprehensive and describes :

- the clinical disease,
- the epidemiology of the disease,
- the notification procedures,
- the control measures,
- the epidemiological situation in neighbouring states and in those of trading partners.

The veterinary profession at large should be regularly provided with information that covers:

- current notification and control procedures,
- the epidemiological situation within the country and elsewhere.

Refresher courses arranged for veterinarians should include all List A diseases.

12.4 The agricultural community

Disease awareness campaigns should be targeted primarily at stockowners and non-professional personnel who regularly visit herds or flocks e.g. AI personnel and livestock hauliers.

The campaigns should emphasise:

- the importance of FMD,
- the clinical signs,
- the importance of prompt reporting,
- the availability of compensatory funds.

Appendix 6 (i)- Annex 1

EMERGENCY ACTIONS IN NON-VACCINATING COUNTRIES

1. Notification

- Suspicion of disease to be reported immediately to the appropriate authority.

2. Investigation

- Immediate investigation by a veterinary officer of the appropriate authority.
- If FMD suspected - farm restrictions imposed immediately if not already in force to stop all movement of livestock, persons or inanimate objects onto or off the premises.
- Special arrangements may be needed if suspected FMD is reported at a market or slaughterhouse.
- Samples collected for immediate transportation to diagnostic laboratory by fastest possible route.
- When the disease has been confirmed in the area a total standstill on the movement of animals within three km of the infected place shall be imposed and remain in force.
- On farm investigations to continue and to include:
  - * total stock count,
  - * preliminary epidemiological investigation to include details of livestock movements on and off the premises, potential personnel contact with disease, or other potential sources of infection such as waste food. Also an assessment of potential for disease spread from the infected place,
  - * assessment of likely arrangements needed for slaughter and disposal of livestock, and any welfare problems anticipated while under restriction.

3. Confirmation

All confirmations of the existence of FMD to be made by the National Authority.

4. Infected premises procedures

After confirmation of disease rapid killing and disinfection is essential to reduce virus emission.

(a) **Valuation**

Procedures listed below may and usually will take place simultaneously:

- immediate valuation of livestock to assess compensation payable
- valuation to include contaminating feeding stuffs and bedding that cannot be disinfected,
- formal appeal procedure needed to ensure that disputes over valuation do not delay killing of stock.

(b) **Killing and disposal of stock**

As soon as valuation is completed all susceptible stock to be killed on the premises, starting with the animals exhibiting lesions. Heads and feet to be covered by plastic bags while awaiting disposal.

- disposal/destruction of carcasses to be contained on premises by burial (or cremation) subject to approval by Local Environmental Authorities,
- consideration may have to be given to disposal elsewhere, possibly via a destructor plant if it is possible under secure conditions,
- cleansing and disinfection,
- preliminary disinfection - yards, driveways, buildings surfaces to be sprayed with a disinfectant approved against FMD, to be repeated as soon as slaughter is completed,
- after removal of carcasses, thorough cleansing and disinfection of premises, equipment and materials. Any contaminated items, which cannot be satisfactorily disinfected to be buried or burned. Fumigation considered if necessary.
- special attention must be given to large quantities of slurry which may need chemical treatment and/or prolonged storage before release.

(c) **Movement restrictions**

- Protection Zone[2] - A minimum of three km radius around the Infected Premises (IP) must be established as soon as FMD is confirmed. Farmers should be warned of the need to regularly inspect their stock

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[2] The definition of these zones should take into account natural boundaries, supervision facilities, meteorological conditions and other relevant factors and should be reviewed if necessary.

and notify any suspicious signs if their farms are located within the Protection Zone. For 15 days after confirmation movements only permitted direct to slaughter, licensed, in emergency. Subsequently licensed slaughterhouse in same Protection Zone, provided 15 days elapsed since killing on IP, and subject to satisfactory inspection by Veterinary Officer. No markets, exhibitions or collecting centres permitted.

- Surveillance Zone[3] - a minimum of 10 km radius around the Infected Premises. Must provide for adequate slaughtering facilities within clearly defined boundaries. Animal movements limited and permitted only under licence within the area. Artificial insemination banned except for semen stored on the farm where it is to be used. Resumption at discretion of officer-in-charge of Disease Control Centre.

- Animals may not be removed from the Surveillance Zone during the first 15 days. Between the 15th day and the 30th day the animals may not be removed from the said zone except to be transported under official supervision directly to a slaughterhouse for the purpose of emergency slaughter.

- Controlled Area - generally in force for a short period, can be very wide area to limit animal movement and to allow veterinary staff to trace and inspect potentially infected animals that may have been distributed widely, such as through a market. Movements licensed and animal gatherings prohibited other than markets for slaughter stock.

- Although movements of animals are permitted through Surveillance and Controlled Areas, under licence, none may pass through a Protection Zone.

- Collection of milk from farms within the Protection Zone is controlled and a detailed code of practice is followed. Vehicles and personnel follow rigorous cleansing and disinfection procedures, and air filters are fitted to the exhaust outlets of bulk milk tankers.

8. Removal of infected premises restrictions

Farm restrictions withdrawn six weeks after completion of slaughter or 30 days after completion of preliminary cleansing and disinfection, whichever is the earlier but subject to continued area controls where other infected premises have been identified. Withdrawal also subject to satisfactory inspection of premises and livestock on continuous premises.

Strategic ("ring") vaccination

The objective of strategic ("ring") vaccination used under emergency conditions is to dampen down the amount of virus circulating in the region and to reduce the risk of further spread.

The inner part of the strategic zone of vaccination should be beyond the area predicted to be already potentially contaminated on the basis of analysis using airborne prediction models and other epidemiological assessments. The area of the zone will be determined by a prediction of the area at risk, the geographical features, the number of doses and the manpower resources available.

The criteria on which the decision of whether or not to apply strategic vaccination is made should include the following:

- species of animals and their densities in the area;
- predicted risk of airborne virus spread;
- geography and other features of the area and practicability of delineating a strategic vaccination zone;
- an assessment of the economic consequences for trade;
- the presence of valuable breeding stock in the area at risk;
- environmental and welfare considerations and public opinion.

Appendix 6 (ii)

SECURITY STANDARDS FOR FMD LABORATORIES

FOREWORD

In 1985 the European Commission for the Control of Foot-and-Mouth Disease, FAO, adopted a document entitled "*Minimum Standards for Laboratories working with FMDV in vitro and in vivo*" describing a set of precautions to be taken by foot-and-mouth disease (FMD) laboratories to avoid an escape of virus. It was prepared at a time when the majority of countries on continental Europe employed systematic annual prophylactic vaccination of their cattle.

Although the above document dealt with all important aspects of FMD containment, it has been found necessary to review it with special reference to the need for more specific technical and general requirements as a consequence of the recent change in Europe to a policy of non-vaccination. As a result the present document has been prepared.

The security standards as specified herein should be considered as minimum requirements for FMD laboratories located in FMD-free countries with or without systematic prophylactic vaccination. Even in countries where FMD is present it is important to avoid the escape of FMD virus from laboratories so the standards in this document are recommended as the minimum for FMD laboratories, regardless of the prevailing disease situation.

INTRODUCTION

Foot-and-mouth disease is one of the most contagious diseases known and manipulating the virus in the laboratory without adequate precautions is a hazard. The escape of a single infectious unit of FMD virus from a laboratory could potentially cause an outbreak.

The main sources of virus or infectious RNA (in increasing risk of hazard) are:

1. Infected tissue cultures.
2. Infected baby mice, guinea pigs, rabbits etc.
3. Physical and chemical processing of large quantities of virus outside closed vessels (e.g. concentration, purification, inactivation etc.).
4. Infected pigs, cattle, sheep, goats and other susceptible animals.

Ways by which the virus or infectious RNA may escape or be carried out from laboratories include:

Personnel
Air
Effluent and other waste
Equipment

Therefore all laboratories manipulating FMD virus must work under high containment conditions. The safety precautions must preclude every kind of escape of virus and special attention must be given to:

- the prevention of illegal entry into the restricted area
- the presence of changing and showering facilities
- the responsible behaviour of personnel within and when they leave the laboratory
- application of rules for primary containment
- the use of inactivated virus where possible
- the maintenance of negative air pressure where virus is manipulated and decontamination of exhaust air
- the decontamination of effluent
- the disposal of carcasses in a safe manner
- the decontamination of equipment and materials before removal from the restricted area

To achieve this containment a variety of technical installations and a comprehensive set of disease security regulations are required under the supervision of a Disease Security Officer.

The Disease Security Officer must regularly receive technical reports about the various installations and monitor their performance. On the basis of day-to-day records he prepares an annual report on security (incidents, improvements etc.) to the director.

FMD laboratories may be authorised to manipulate live FMD virus for:

DIAGNOSIS
and/or
LARGE SCALE VIRUS PRODUCTION,
VACCINE TESTING INCLUDING INFECTION OF LARGE ANIMALS, and
EXPERIMENTAL INFECTION OF LARGE ANIMALS.

MINIMUM REQUIREMENTS

I. Personnel

1. Control of access to the premises - prevention of illegal entry to the restricted area[1].

2. Personnel must be appropriately trained for the position held.

3. Entry into - and exit from - the restricted area must take place only through changing and showering facilities. This means a complete change from private to working clothes on entry - and another complete change as well as a shower on exit.

4. Personnel must be regularly trained in disease security.
A code of disease security practice, including instructions for entry into - and exit from - restricted areas, must be available for all employees on site and for visitors. The disease security regulations must have been read and signed by each employee at the beginning of their employment.

5. All staff members must be appropriately informed and regularly trained in emergency evacuation procedures with special attention being given to security requirements in cases of fire.

6. Personnel must contractually agree not to keep any animals which are susceptible to FMD, nor reside on premises where such animals are kept, nor in the same household as other persons working with such animals and to abide by minimum standards of quarantine, i.e. no contact with animals susceptible to foot-and-mouth disease for at least three days. The same applies to visitors.

   Special care should be taken to ensure that visitors are instructed in decontamination procedures and that these procedures are properly followed.

7. Regular supply of appropriate laboratory clothing for use within the restricted area.

II. BUILDINGS

8. General construction of buildings and their surfaces, including ducting of the air conditioning system:

   - well maintained condition with a high standard of airtightness

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[1] Restricted area: Area where virus is manipulated and rooms in direct and indirect contact therewith.

- insect, rodent and bird proof

9. Windows:
   - non-opening and able to withstand operating pressures
   - shock proof in animal rooms

10. Doors:
   - warning sign emblem at entrances:

ACCESS FOR AUTHORISED PERSONNEL ONLY BIOLOGICAL HAZARD

   - access restricted by locked doors
   - airlocks provided with self-closing doors or with airtight doors
   - doors fitted with windows where appropriate

11. Walls, floors, ceilings:
   - appropriate surfaces
     easily cleaned
     sealed (airtight) entry of service lines

III. AIR

Ventilation systems

12. Air is removed from virus manipulating areas through a HEPA filtration system which guarantees a negative pressure to atmosphere of at least 35 pascals (3.5 mm water) for laboratory rooms and rooms for small experimental animals and 50 pascals (5 mm water) for large scale virus production rooms and for large animal rooms.

13. The exhaust air from rooms where experiments in large animals are carried out must pass through two HEPA filters in series.

14. The filter installations must allow for their testing and safe changing *in situ*.

15. Manometers measuring the negative pressure in facilities and, where appropriate, the pressure drop across filters must be installed. They must be monitored and recorded regularly and, where appropriate, incorporate alarms. Every effort should be made to prevent a positive pressure within the building when either shutting off or turning on the ventilation system. Input and extract fans can be interlocked so that the failure of an extract fan shuts off input air and prevents reflux of contaminated air to the exterior, e.g. by means of a flap valve in the air intake duct.

16. The laboratory power supply should be equipped with a back-up source of electricity which starts without a delay of more than a few minutes in the event of power failure, or the commercial power supplier must guarantee a supply from an alternative source within a few minutes.

17. Vertical flow safety cabinets (Class 2), approved and checked, with absolute filtration of exhaust air must be available for the handling of FMD virus outside closed vessels.

Monitoring of ventilation systems

18. Ventilation systems should be continuously monitored to ensure proper function.

19. Before installation all filters must have passed an overall test for efficiency (normally done by the manufacturer).

20. When HEPA filters are installed or replaced an efficiency test must be carried out to ensure proper installation and function of the filters. This testing must be done at least once every two years, or when needed, e.g. when there is a sudden change in pressure over the filters. Testing of filters should be carried out by properly trained staff.

21. Among the methods acceptable for testing efficiency of filtration are:

A. A smoke challenge and photometric detection system using either DOP (dioctyl phthalate) or Shell Ondina (ANNEX 1 & 4).

B. A lithium flame photometer test for highly efficient filters (ref.: Hans Flyger and H.C. Rosenbaum, in American Industrial Hygiene Association Journal, Vol. 26, 409-412, 1965 (ANNEX 2).

C. Electronic particle counting (ANNEX 3).

Change of HEPA filters

22. Filters must be changed when the pressure difference exceeds certain limits in accordance with the instructions given by the manufacturer, or whenever needed.

Replacement of both pre- and absolute (HEPA) filters must be safe and must take place in accordance with an authorised procedure. Strict precautions must be taken to prevent spread of virus from filters or via contaminated air. Replacement of filters from outside must take place after decontamination *in situ* or in "safe change" air-handling units.

Decontamination of filters after use: wet autoclaving or incineration.

23. Filters in safety cabinets must be tested following installation and thereafter on a regular basis using the same or equivalent methods as used for testing of the general HEPA filtration system. When changed, filters from safety cabinets must be autoclaved or otherwise decontaminated before removal from the restricted area.

IV. EFFLUENT

24. Effluent from laboratories and from facilities holding animals should be treated in a manner which ensures that the inactivation of FMD virus has been achieved. For this purpose heat or chemical treatment can be used in a system which ensures that all the material is exposed to the specific treatment. The entire effluent treatment system, including the system for transport of effluent to the treatment unit, must comply with high containment conditions. There must be sufficient storage capacity (tanks) for the storage of untreated effluent.

25. The equipment should have automatic monitoring systems to ensure proper function. It must be ensured that the required temperature/pH is reached, and that the installation will stop automatically when required limits are reached, e.g. sterilisation temperature, time and maximum temperature or pH for discharge of the effluent.

Liquids
(slurry, waste water)

26. Heat treatment:
100^0 C for 1 hour or an equivalent heat effect.

27. Monitoring:
Automatic and continuous temperature/time/flow rate recording at different stages of the process.

28. Chemical treatment:
NaOH or Na_2CO_3 or other alkaline treatment at pH 12 for at least 10 hours. Thorough mixing of the materials must be ensured. After treatment the mixture must be neutralized and the pH must be checked before the effluent is released.

29. Monitoring:
Automatic and continuous control and regulation of pH.

Solid waste
(animal carcasses, feedstuffs etc.)

30. Wet heat treatment (autoclave, 115^0 C in the center of all material for 30 min. or an equivalent heat effect, e.g. in a rendering process) on site.

31. Incineration on site. The incinerators must comply with current safety standards and be fitted with afterburners.

32. The system must exclude the possibility of re-contamination.

33. Monitoring:
The heating systems should be continuously monitored and recorded as part of a fail/safe system. In the event of failure the system must be protected as far as possible against the release of potentially infectious material.

V. EQUIPMENT AND MATERIALS

Laboratory fittings

34. Benches: - impervious surfaces

35. Centrifuges, sonicators, homogenizers etc.: - must be designed so as to contain aerosols

36. Laboratory facilities and equipment must be cleaned and appropriately disinfected at regular intervals. Cleansing and disinfection must be supervised and recorded.

Handling of FMD virus

37. Primary containment must be given proper attention. Handling of FMD virus outside closed vessels must be done in approved (Class 2) safety cabinets.

38. Processing of large quantities of virus must take place in closed systems. Proper attention should be paid to the decontamination of effluent air from vessels and pipe work and to the decontamination of the processing systems before opening for cleaning/maintenance/repair etc.

39. Inoculation of animals and the keeping of infected animals must take place within the restricted area under negative pressure. Personnel must wear appropriate protective clothing when handling virus suspensions and when inoculating or handling infected animals. On exit from animal rooms protective clothes and footwear must be left inside the room or appropriately decontaminated before being taken out.

Removal of equipment and materials

40. Before removal from restricted areas equipment must be decontaminated according to the size and use of the equipment:

41. either by: heat (wet autoclave), if possible, at 115^0 C for 30 min. or an equivalent heat effect.

42. or dry heat at 50^0 C for 48 hours, in special situations, e.g. for certain sensitive instruments.

43. or after surface disinfection, fumigation with formaldehyde (10 g/m^3 at 70 % RH) for at least 10 minutes or (3 g/m^3) for 24 hours or equivalent with other aldehydes, e.g. glutaraldehyde, or ethylene oxide (0.8 g/litre for 1.5 hrs. at 50^0 C)

44. or thorough wash in an appropriate chemical disinfectant such as:

- 4 % washing soda (Na_2CO_3)
- 0.5 % caustic soda (NaOH)
- 0.2 % citric acid
- 4 % formaldehyde or equivalent with other aldehydes. e.g. glutaraldehyde
- or other disinfectant officially approved for the purpose

Note: The efficiency of these chemical disinfectants is considerably improved by the addition of a non-ionic detergent (concentration 0.005 %).

45. Decontamination of clothing before removal from the restricted area for laundry: heat (wet autoclave) at 115° C for 30 min. or equivalent heat effect. The laundry process must involve at least a hot (80° C) standard detergent wash at some stage of the cycle. Laundering must be done on site.

46. Treatment of papers before removal: 50° C for 48 hours, or an equivalent heat effect, or, for single sheets, fumigation. Removal of books should be exceptional and under the control of the Disease Security Officer. Fax or photocopy barrier systems should preferably be used.

47. All contaminated materials (including dead laboratory animals) must be placed in sealed bags inside leak-proof containers and decontaminated (e.g. by autoclaving) or transported for incineration or rendering on site. The surface of these containers should be disinfected before removal from the restricted area.

48. Before sending non-FMD biological material to another laboratory the necessary precautions must be taken to ensure that the material does not contain FMD virus. The recipient laboratory must be informed about the potential risk of material coming from a laboratory manipulating FMD virus. The recipient laboratory must further sign a statement that it is prepared to receive the material and that it will take the necessary precautions.

Air Filtration Systems at the Institute for Animal Health, Pirbright

At Pirbright air filtration systems have been installed in all buildings in which viruses are used or experimental animals housed. The Buildings are maintained under negative pressure in relation to the atmosphere and the extracted air is passed out through two H.E.P.A. filters arranged in series. There are now 25 such units covering all laboratories and animal units.

Filter Leak Testing

H.E.P.A. filters are tested by producing an oil/smoke aerosol by blowing (CO_2) carbon dioxide through a hot liquid plasticiser (Ondina Oil) which will produce particles of 0.3 microns in diameter.

A high concentration of "smoke" particles are introduced into the air trunking up-stream of the H.E.P.A. filters. The concentration of challenge particles is determined by the forward light scattering photometer (J.M. 8000). When a photometer reading of between 4.0 and 4.5 (Log scale) has been reached this will indicate that there is a concentration of 80 - 100 micrograms of smoke per litre of air. This is considered to be a satisfactory challenge as it is 1×10^4 times above the minimum sensitivity of the photometer.

Holding the meter probe approximately 2.5 cm from the filter face on the downstream side, the entire surface area including the gasket, is traversed using slightly overlapping strokes at a rate of not more than 3 metres per minute. A significant leak is described as 0.01% or more of the challenge concentration.

Frequency of H.E.P.A. filter testing.

1. Filters must be tested when installed in the air handling unit.

2. When there is a sudden change in pressure over the filters.

3. Every six months in the large animal compounds.

4. If the air filtration system has been inoperative for more than one week.

Appendix 6 (ii) Annex 2

Air Filtration Systems at the State Veterinary Institute for Virus Research, Lindholm

At Lindholm air filtration systems have been installed in buildings in which FMD virus is handled or experimental animals are housed. Facilities for virus/vaccine preparation and houses for experimental animals are maintained under negative pressure in relation to atmosphere and the extracted air is passed out through two H.E.P.A. filters arranged in series. There are at present 16 such units and 9 units with single H.E.P.A. filters.

Testing of filtration efficiency

H.E.P.A. filters are tested by producing an aerosol of lithium sulphate microcrystals with a particle size of 0.3 microns.

This is achieved by atomizing a 2% aqueous solution of lithium sulphate monohydrate by a specially constructed apparatus equipped with 3 Collison type atomizers. The aerosol is introduced into the exhaust air channels in such a way that even distribution of particles over the whole filter area is obtained. In the animal units, where most of the air is recirculated, the aerosol is introduced into the recirculation system, which in fact fills up the whole room with particles.

With the aerosol generator running air is sampled by controlled flow through 50 mm ∅ cellulose nitrate membrane before and after H.E.P.A. filters. The filters are transferred to measuring flasks, dissolved in nitric acid, diluted, and lithium is assayed by atomic absorption spectrofotometry. A retention of more than 99.95% of Li is considered as correct performance.

Contrary to the sodium flame test, which may be seriously influenced by common dust particles, this lithium assay takes advantage of the fact that lithium is a very rare metal in nature.

An inconvenience is the relatively long sampling time (1 - 8 hrs) required to make sure that a sufficient load of particles has reached the filters in relation to the sensitivity of the meter.

The method was recommended by the Danish Atomic Energy Commission originally for use in monitoring exhaust air from nuclear reactors.

Frequency of H.E.P.A. filter testing

Filters must be tested

- when installed in the air handling unit,
- when there is a sudden change in pressure over the filters,
- at least once every 12 months in the large animal compounds,
- if the air filtration system has been inoperative for more than one week.

Appendix 6 (ii) Annex 3

Air Filtration Systems at the Federal Research Centre for Virus Diseases of Animals, Tübingen

At Tübingen exhaust air filtration systems are in function in buildings in which FMD virus is handled or in which experimental animals are housed. These parts of the Research Centre are maintained under negative pressure in relation to atmosphere. Extract air is passed through a combination of prefilters and HEPA filters. For the laboratory building, a two chambers system is used. When filters have to be replaced air stream through one chamber is uncoupled. After removal of the filters from the isolated side, the chamber is disinfected. Subsequently, new filters are installed from "outside". During this procedure the other chamber remains in function, and air stream is not interrupted.

When filters have to be exchanged in animal houses a bypass system for the extract air flow is applied.

Filter Leak Testing

HEPA filters are tested for leak proof and efficiency with the aid of an electronic particle counter, which detects particles of $\geq$ 300 nm (0,3 micron) (exclusion size). This apparatus is equipped with an aspirating unit formed like a funnel and can be used for testing both the airtight site of the frame and efficiency of the filter area. The detector is equipped with an optical unit to detect passing particles, and an electronic regulation system assuring a high signal to noise ratio. Results are continuously shown on a display and printed out upon release.

Appendix 6 (ii) Annex 4

Air Filtration Systems at the Centraal Diergeneeskundig Instituut, (CDI), Lelystad

At the CDI high containment building in Lelystad air filtrating systems have been installed in all buildings in which viruses are used or experimental animals are housed.

Different levels of negative pressure in relation to the atmosphere are maintained in these buildings. The exhaust air passes a combination of prefilters and HEPA-EU 13 filters. The exhaust air from the rooms that may contain high concentrations of FMDV passes two HEPA filters arranged in series. At present there are 272 filter units in use.

Gasket testing:

Most of the airhandling units are equipped with a rill for testing the gaskets of the filters. A filter is discarded if a leak of more than 2 1/h at a pressure of 200 Pa is detected.

Efficiency testing:

The efficiency of the filters is measured in situ by generating a DOP-oil aerosol (ATI TDA4A). It contains particles of 0.3 um. A high concentration of those particles is introduced into the air upstream of the HEPA filter. The concentration of particles in the downstream air is measured by a ATI TDA2E photometer. A filter is discarded if the efficiency is less than 99.995% of the challenge concentration (equivalent to a hole of 1 mm in diameter in a filter surface of 18 m^2). The tests are performed by a member of the technical staff in collaboration with someone from the Safety and Quality Assurance Department.

Frequency of testing:

Filters are tested when installed in the airhandling units and every two years if they are not discarded previously. Prior to incinerating, the filters are fumigated with formaldehyde in situ.

MINIMUM CONDITIONS FOR THE IMPORTATION INTO EUROPE OF LIVE ANIMALS, FRESH MEAT AND OFFAL OF THE BOVINE SPECIES

CONSIDERATIONS

1. Following infection with FMD virus and recovery from clinical disease cattle and other ruminants may carry the virus for as long as 6 months or more.

2. The carrier state may also develop in vaccinated cattle following exposure to FMD virus, e.g. during outbreaks of the disease.

3. If, by accident, an inadequately inactivated vaccine was used in an area, infection could be inapparent at first, but in all likelihood it would eventually lead to the appearance of clinical disease.

4. Studies on the carrier state, in particular in sheep and goats, still remain to be finalised. There is no evidence for a true carrier state in pigs, that is persistence of virus beyond one month after the acute phase of disease.

5. During maturation at an ambient temperature of more than $+2^0$ C for at least 24 hours, the pH of normal cattle carcass muscles will drop to a level where FMD virus is inactivated. However, organs such as lungs, liver, kidneys, brain, bone marrow and lymph glands do not develop this degree of acidity *post mortem,* and FMD virus will survive in such tissues during maturation as above. The same consideration applies to masseter muscles although some virus inactivation takes place in these tissues.

6. The possible influence of maturation on the survival of FMD virus in carcass meat from sheep and goats and pigs is still not fully documented. Furthermore, in general terms it is impractical to debone sheep, goat and pig carcasses prior to export. Therefore, the following recommendations on the use of maturation and deboning only apply to cattle.

RECOMMENDATIONS

General requirements

1. The exporting country must have an effective State Veterinary Service as well as an effective and reliable veterinary infrastructure at the local level.

2. A laboratory capable of diagnosing FMD must be available to the Veterinary Services for rapid laboratory diagnosis.

3. Notification of FMD must be compulsory. If outbreaks occur the type and subtype of field virus and any changes thereof must be notified to the appropriate authority in the importing country. All new strains of virus must be forwarded to the World Reference Laboratory.

4. Approval of abattoirs, deboning, cutting and processing plants should be under the responsibility of the competent National Veterinary Authority.

5. If vaccine is used, proper procedures for virus inactivation must have been applied, including the application of a first order inactivant as well as in-process control of the inactivation slope (linearity). Testing for safety and potency must have been carried out properly and with a satisfactory result.

Special requirements

A. IMPORTATION OF LIVE ANIMALS

A.1. Importation should be allowed from a country (or region within a country, where appropriate) which has been free from FMD for at least 2 years, which has not practised vaccination for at least 12 months and which does not allow on to its territory animals that have been vaccinated less than one year previously, provided that the imported animals

- have not been vaccinated against FMD,
- have remained in the territory of the country concerned for at least 6 months before importation or since birth,

and provided that

- a national plan for dealing with FMD outbreaks has been developed by the exporting country and made available to the importing country. The main aim of the plan should be the rapid elimination of the virus from the country concerned. To this end the plan must include a total stamping out strategy and other appropriate strict control measures.

A.2. Importation should be allowed from a country which has been free from FMD for at least 2 years, which has practised vaccination within the last 12 months and which allows vaccinated animals on to its territory, provided that the imported animals

- have not been vaccinated against FMD,
- have remained in the territory of the country concerned for at least 6 months before importation or since birth,

- have been isolated in a quarantine station in the country of origin under the surveillance of an official veterinarian for at least 2 weeks prior to exportation, with no contact to other animals than those forming part of the consignment. During this period of at least 2 weeks the animals must have reacted negatively to a probang test (cattle, sheep and goats) and to a serological test for antibodies against FMD virus carried out not less than 7 days after entry into the quarantine. Furthermore, this should be followed by a quarantine period of at least 2 weeks in the country of destination,

and provided that

- a national plan for dealing with FMD outbreaks has been developed by the exporting country and made available to the importing country. The main aim of the plan should be the rapid elimination of the virus from the country concerned.

- a properly inactivated vaccine conforming to international standards is used,

For the purpose of paragraphs A.1. and A.2., a country may continue to be considered as having been free from FMD for at least 2 years, even if a limited number of outbreaks of the disease have been recorded on a limited part of its territory, on condition that the disease was eradicated within a period of less than 3 months subject to evaluation by the competent authority of the importing country on a case by case basis.

A.3. Importation should be allowed from a country which has been free from FMD for less than 2 years, which has practised vaccination within the last 12 months and which allows vaccinated animals on to its territory, provided that:

- the same conditions as under A.2. are fulfilled,

- the animals have remained on the holding for at least 6 months,

- additional requirements as may be specified by the importing country are satisfied.

B. IMPORTATION OF FRESH MEAT (EXCLUDING OFFAL)

B.1. Importation of fresh meat[1] should be allowed from a country (or region within a country, where appropriate) which has been free from FMD for at least 12 months prior to the date of slaughter and which has not practised

[1] Fresh meat (including beef) means meat which has not undergone any treatment other than cold treatment to ensure preservation.

vaccination for at least 12 months and which does not allow on to its territory animals that have been vaccinated less than 12 months previously, provided that:

- the meat originates from animals which have remained in the territory of the country concerned for at least 3 months before slaughter or since birth,

- a national plan for dealing with FMD outbreaks has been developed by the exporting country and made available to the importing country. The main aim of the plan should be the rapid elimination of the virus from the country concerned. To this end the plan must include a total stamping out strategy and other appropriate strict control measures.

B.2. Importation of beef[1] should be allowed from a country which has been free from FMD for less than 12 months and/or which has practised vaccination within the last 12 months, provided that:

- the beef originates from animals that come from holdings in which there has been no outbreak of FMD in the previous 60 days, and around which within a radius of 25 km there has been no case of FMD for 30 days,

- the animals have remained in the territory of the country concerned for at least 3 months before slaughter or since birth,

- the animals have been transported directly from their holding of origin to the approved slaughterhouse concerned without passing through markets, without contact with animals which do not comply with the conditions required for export of meat to Europe and, if conveyed in a means of transport, the latter has been cleaned and disinfected before loading,

- the animals are slaughtered as soon as possible, and not later than 72 hours, after their arrival in approved slaughterhouses which conform to international standards and where the animals will be subjected to *ante mortem* inspection by authorised veterinarians and *post mortem* inspection under the direct responsibility of authorised veterinarians, and found to be free from FMD during these inspections. The *ante mortem* inspection should be carried out within 24 hours of arrival in the slaughterhouse and repeated if the animals are not slaughtered within 24 hours. The *ante mortem* inspection should include examination for clinical evidence of FMD and where appropriate a detailed examination of feet and mouth.

- lairage facilities at approved slaughterhouses are adequate and capable of being cleansed and disinfected effectively,

- the beef does not contain any bones or major lymphatic glands. The de-boned beef must originate from carcasses which have matured at an ambient temperature of more than +2°C for at least 24 hours before the bones were

removed. After maturation and before removal of the bones, the pH value of the beef must be less than 6 as measured in M. longissimus dorsi, which should be controlled in each half carcass by probe ("spear") electrode or other proven method. Measurements should be recorded.

- the beef is clearly marked in an agreed manner so that the identity of the slaughterhouse of origin can readily be recognized.

- if FMD is found at *ante* or *post mortem* inspection, further preparation of beef for export to Europe will only be authorized after slaughter of all animals present, removal of all meat, and the total cleaning and disinfection of the establishment(s) under the control of an official veterinarian. Furthermore, all precautions must be taken to ensure no possibility that contaminated meat is exported.

C. IMPORTATION OF BOVINE OFFAL

C.1. Importation of offal should be allowed from a country (or region within a country, where appropriate) which has been free from FMD for at least 12 months and which has not practised vaccination for at least 12 months and which does not allow on to its territory animals that have been vaccinated less than 12 months previously, provided that:

- the offal originate from animals which have remained in the territory of the country concerned for at least 3 months before slaughter or since birth,

- a national plan for dealing with FMD outbreaks has been developed by the exporting country and made available to the importing country. The main aim of the plan should be the rapid elimination of the virus from the country concerned. To this end the plan must include a total stamping out strategy and other appropriate strict control measures.

C.2. Importation of offal should be allowed from a country which has been free from FMD for less than 12 months and/or which has practised vaccination within the last 12 months, on the following conditions:

- the offal must come from animals originating from holdings in which there has been no outbreak of FMD in the previous 60 days, and around which within a radius of 25 km there has been no case of FMD for 30 days, and the animals must have been found to be free from FMD before and after slaughter,

- the animals have remained in the territory of the country concerned for at least 3 months before slaughter or since birth,

- diaphragmatic muscles ("skirts") from which lymphatic glands, adhering connective tissues and fat have been removed, should be allowed for importation as fresh meat for human consumption after maturation at a temperature of more than +2°C for 24 hours prior to freezing, provided they come from carcasses which fulfil the requirements under B.2.

- masseter muscles, from which lymphatic glands, adhering connective tissues and fat have been removed and which have matured at a temperature of more than +2°C for 24 hours prior to freezing, should be allowed only for manufacture of cooked meat based products or for the production of pet food. The processing should ensure total inactivation of any FMD virus possibly present, i.e. the internal temperature of the product must reach at least 70°C for at least 30 minutes when processed by retort cooking or 80°C must be attained in the centre of the product for non-retort processing.

- all other offal including hearts and tongues, appropriately trimmed and matured as described above, should be allowed only for specified technical purposes, e.g. production of pet food/pharmaceuticals, provided that any FMD virus possibly present in the raw material will be totally inactivated during manufacture (heat treatment or other proven method). Any packaging, wrapping or residual processing material should be disposed of to avoid any animal health risks.

- the raw materials mentioned under 4rd and 5th indent should be clearly identified and transported under strict control directly from the port of arrival in Europe to the processing plant in leak-proof and sealed containers.

- in the processing plant appropriate cleansing and disinfection procedures must be carefully applied. Special attention should be paid to the necessity of carefully separating processed from unprocessed materials.

It is permissible for an importing country to impose stricter conditions.

Selected references

EC Council Directive	64/432 of 26 June 1964 as amended
EC Council Directive	64/433 of 26 June 1964 - -
EC Council Directive	72/462 of 17 December 1972 - -
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IMPORTATION OF DEBONED SHEEP MEAT FROM SOUTH AMERICA: RISK FACTORS COMPARED WITH DEBONED BEEF

1. Some countries and regions have not reported FMD for several years e.g. Uruguay and the Patagonia region of Argentina.
2. The pH drop in sheep meat during maturation parallels that in beef.
3. The carrier state in sheep is shorter than in cattle.

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1. FMD in adult sheep is often subclinical or mild.
2. Lameness in sheep e.g. foot-rot due to *F. necrophorus* is common and can be confused with FMD.
3. The surveillance of sheep is less intense than that of cattle.
4. Sheep are not routinely vaccinated to exposure to virus is more likely to lead to infection and the arrival of viraemic animals at abattoirs.
5. In some regions sheep travel to abattoirs on foot with increased likelihood of depleted muscle glycogen and a higher pH *post mortem.*
6. *Ante* and *post mortem* examination of sheep is more difficult than for cattle due to greater numbers and a faster through-put.
7. A faster through-put also makes the checking of pH more difficult.
8. The ultimate pH of sheep meat is generally higher than that of beef with increased risk of virus survival.

CONCLUSIONS

1. The risk associated with deboned sheep meat is greater than that of deboned beef.

2. The reliability of farmers and the veterinary service in reporting suspected FMD needs to be more critically assessed when considering the importation of sheep meat.

3. The efficiency of the meat inspection service at abattoirs needs to be more critically assessed for trade in sheep meat.

A.I. Donaldson
AFRC Institute for Animal Health
Pirbright

3 March 19932

Appendix 7

Second Phase of the Buffer Zone Project in Turkey

The Thrace area in Turkey which continues to remain free from FMD since 1978 and where vaccination has not been carried out since 1989, with the exception of vaccination along the borders with Bulgaria in 1991, is an area requiring continuous surveillance in order to ensure that no virus is circulating in animals in the area.

For this purpose, independently from the sanitary measures which are applied by the Turkish Veterinary Services within the framework of the surveillance programme decided by the EUFMD and the FA0/EC/0IE Tripartite FMD Group, two surveys have been carried out by the WRL, Pirbright, U.K. in collaboration with the Turkish Veterinary Services.

The first survey was carried out in the area of the outbreaks reported in Bulgaria in July 1991, to ascertain the extent and possible origin of the outbreak. The results did not reveal any evidence of active infection in the animals tested.

A second serological survey was carried out in the Thrace area of Turkey for the purpose of establishing the presence or absence of FMD virus in this area. 1,822 sera were collected and tested for antibodies against types 0 and A_{22} Mahmatli vaccine strains.

The results of the surveys were reviewed by the Research Group of the EUFMD at their Session held at Mittelhäusern, Switzerland, September 1992, and by the FA0/EC/0IE Tripartite FMD Group at their meeting held in Brussels, Belgium, in January 1993 (see appendices 2 and 3).

At both meetings, it was agreed that such surveys should continue in order to cover the whole of Thrace especially in unsurveyed areas and around abattoirs. Pirbright Laboratory could help plan such a survey which is considered essential if the status of the Thrace area is to be monitored and maintained. The cost of the surveys were met from the relevant EC Trust Fund 911100.

Strategic vaccination area, western Anatolia

This area was established following the decision taken at the FA0/EC/0IE Tripartite FMD Group meetings held in 1989 and 1990, and on the recommendation of the Fifty-second Session of the Executive Committee of the EUFMD held in Istanbul in March 1990. The maintenance and implementation of the vaccination programme and the application of the appropriate security measures in the strategic vaccination area is entirely under the responsibility of the Turkish Government. However, due to lack of funds and maintenance problems at the FMD Institute in Ankara, vaccine production was decreased and consequently the vaccination programme in the whole country was affected.

Assistance to the FMD Institute

Follow-up action on technical assistance to the Ankara Institute has been implemented by the Secretary of the Commission in collaboration with the Turkish and European Community authorities concerned.

- Two highly qualified consultants were recruited in the field of vaccine production and tissue culture to review the position of the laboratory and assess the assistance needed in order to increase the production capacity.

- The consultant on FMD vaccine production was again recruited for a period of three months, from June to August 1992, for the purpose of assisting the FMD laboratory in improving the innocuity control for a period of three months, June-August 1992.

Both consultants were recruited through FA0, and the costs met from the relevant fund for the campaigns.

The breakdown of income/expenditure for Trust Funds 9111 (EC) and 9097 (non-EC) is presented at Appendix 10 - Financial Report.

The FMD situation and the vaccine production and vaccination programme in Turkey are presented in a very clear and concise report prepared by Professor Istanbulluoglu (see Annex 1).

Annex 1

THE FMD STATUS AND CONTROL METHODS USED IN TURKEY

Prof. Dr. Ersin Istanbulluoglu

General Information

According to 1991 statistical data Turkey owns 42.000.000 sheep, 11.000.000 goats, 11.500.000 cattle, 400.000 buffaloes, 1.600.000 salipeds, 2.740 camels and 11.000 hogs, while to be added 180.000.000 poultry we have been facing various technical and financial problems to protect animals against the epizootics. And according to the geographical situation, Turkey has also been under a potential risk to expose a lot of exotic contagious diseases of domesticated animals.

I. Introduction

In 1992 Foot and Mouth Disease in Turkey continued to occur endemically in some parts of Anatolia as in previous year. According to the subtype determinations made at Foot and Mouth Disease Institute, it has been observed that the outbreaks have been caused by O_1 and A_{22} subtypes of virus, It will be useful to examine Thrace and Anatolia Regions one by one in order to establish the spread of disease and the necessary preventive measures being taken.

II. Status of the Disease:

1. Thrace Region:

Due to annual preventive vaccinations done since 1962 Thrace buffer zone has been free and since 1978 there have been no outbreaks. This situation has also continued untill now. In order to maintain disease free situation, great effort are being made for the annual vaccination campaign to be applied on time and control animal movements between provinces and application of quarantine measures in the region since 1990 Thrace region was established as "free zone"

2. Anatolia Region:

278 Outbreaks were observed in Anatolia Region, in 1992 Although O_1 and A_{22} subtypes of virus have been identified from samples sent from disease occuring areas it is seen that O_1 type of virus has been dominant.

III.Vaccination Campaings:

A-Buffer Zone Vaccination:

(Marmara and Aegean Regions; Anatolien parts of İstanbul and Çanakkale provinces and Kocaeli, Sakarya, Bilecik, Eskişehir, Bolu, Bursa, Balıkesir, Kütahya, Uşak, Manisa and İzmir provinces.)

Within the frame of the Foot and Mouth Disease Control Project in 1992 all of the cattles were vaccinated twice and sheep once with bivalant (O_1 + A_{22}) vaccine a year west Anatolia.

Rate of vaccination in these provinces is determind to be 80 % minimum.

B-The other provinces

Anatolian provinces which have been the initial points of livestock movements due to their considerable livestock, populations suitable for marketing and sales. According to the vaccination programme proposed for 1992, rate of vaccination in Central Anatolia and Eastern Anatolia provinces were to have determined to be 80 % minimum. Cattle were have vaccinated twice annually, once in every six months.

However unexpected difficulties have been occured in the production prosedures of the FMD vaccine, such as obstacls of pure steam producer, lack of spare parts, so on, that's because we couldn't get enough vaccine we planned in 1992 and Ring vaccination had to be applied during some outbreaks.

Vaccinations in Anatolia Region includes ring vaccinations, regional vaccinations and vaccination at breeding farms in 1992

Preventive Vaccination results in 1992 are as follows;

Region	Number of Animals Vaccinated		
	Cattle	sheep	Total
1.West Anatolia (Buffer Zone)	2.496.145	3.792.247	6.288.392
2.Other Provinces	8.387.320	1.750.082	10.137.402
3.Ring Vaccinations	104.079	95.876	199.955
T O T A L	10.987.544	5.638.205	16.625.749

In 1992 **16.625.749**.head of animals in the country including Anatolia, were vaccinated against O_1 and A_{22} types.

IV Principles of FMD control in 1992

A.Free Zone

No more vaccine applications have been conducted in the Thrace Region which has been free from FMD by systematic control activities of many years duration; in case of any outbreaks, local quarantine measures will rapidly be taken and diseased animals will be stamped out.

B.Buffer Zones

After Thrace Region's free from the disease the following re-adjustments have been made in the Buffer Zones;

Marmara and Aegean Regions

Anatolian parts of İstanbul and Çanakkale provinces and Kocaeli, Sakarya, Bilecik, Eskişehir, Bolu, Bursa, Balıkesir, Kütahya, Uşak, Manisa and İzmir provinces.

Rate of vaccination in these provinces have been determined to be 80 % minimum. Cattle will be vaccinated twice annually, once in every six months and sheep once a year.

C.Other Provinces

In the remaining 60 provinces outside the Buffer Zones and Thrace, FMD vaccination were only allocated as to be applied to the 80 % of the existing cattle population. Priority will be given to highways and way-side villages, to marketing places to the villages on the villages on the line of artificial insemination programme and to the farms where control projects are being implemented.

The above mentioned 60 provinces will been supplied with the FMD vaccines untill the end of March latest and vaccinations will have been complated by the end of April.

D.Disease outbreaks

The principles of FMD control consists of reporting, management isolation and disinfection activities to be performed in the shortest time possible, in other words, to eliminate the disease by using all of the existing sources. Ring vaccination in the outbreak has been

carried out. Pathologic materials have been sent for typing in each case.

The other districts within the province and all the negihbouring provinces have been informed about the disease outbreaks as soon as possible and records have been drawn up in this respect.

The status of FMD in buffer zone (1990 - 1992)

Years	Number of Outbreak	Cases		Death		Vaccinated	
		Cattle	Sheep	Cattle	Sheep	Cattle	Sheep
1990	56	194	19	-	-	2.290.115	4.389.541
1991	142	337	45	-	-	1.985.359	4.499.361
1992	66	97	5	-	-	2.496.145	3.792.247
T O T A L	264	628	69	-	-	6.771.619	12.681.149

E.Livestock Movements

The requirement to the effect that cattle and sheep have been vaccinated againts FMD two weeks before the date of their dispatch for transport within the country, have been strictly applied and followed up in 1992 also will be continued. Rules for the adoption of the neccessary discipline has been applied by those concerned who have been duly informed beforehand.

In addition, for an efficient monitoring of livestock movements which play major role in national economy control stations has been established on the Giresun-Gaziantep line and also on the points of transit from the Marmara to thrace Region.

RESULTS OF APPLICATIONS IN 1992

A-Free Zone(Thrace)

No more vaccine applications have been conducted in the Thrace. No serious problem occured in this region.

B-Buffer Zones

Marmara and Aegean Regions

Result of vaccine application is satisfactory in this region Patern of Thought Incedence of the disease increased during Festival period, the diseased-animals were transported in to the region from outside provinces.

C.Other Provinces

The vaccination campaign its results are not satisfactory. The diease determined in all provinces.

RESULTS OF APPLICATİONS İN 1992

Distribution of Foot and Mouth disease by months during last two years are as follows:

MONTHS(Outbreaks)

Years	Jan	Fab	Mrch	Apr	May	June	Jul	Aug	Sep	Oc	Nov	Dec	TOTAL
1991	70	55	45	77	97	109	123	47	53	45	32	18	771
1992	19	23	22	18	18	7	13	49	51	17	20	21	278

When the monthly table is examined,

Decrease in FMD cases was observed in 1992. These encouraging figures might have been achieved by the preventive vaccination campagins carried out paralel to taken other control measures.

It was possible to bring the disease under control as a result of strict preventive measures including ring regional vaccinations and revaccination, Sanitary control measures were taken along the Iranian, Iraq, Syrian, Greek and Bulgarian Borders.

Results of Virus Typifications:

In 1992 557 samples from infected are as were examined at Foot and Mouth Diesase Institute. According to the results, 466 samples were O_1 49 samples A_{22} types and 42 samples were negative. These figures indicate that, O_1 type of virus carries the dominat characteristic. The disease has infected young cattle and resulted in mild infection.

Typing results in 1991-1992 ares as follows:

Years	Sample	O_1 type	A_{22} type	Destroyed	Negative
1991	1159	1003	106	6	44
1992	629	530	51	-	48
T O T A L	1788	1533	157	6	92

PRINCIPLES OF FMD CONTROL IN 1993

A- Free Zone

No more vaccine applications will be conducted in the Thrace

B- Buffer Zone (Marmara and Aegean Regions)

Anatolian parts of İstanbul and Çanakkale provinces, Kocaeli, Sakarya Bilecik, Eskişehir, Bolu, Bursa, Balıkesir, Kütahya, Uşak, Manisa and İzmir provinces.

Coverage of vaccination in these provinces is determined to be 90 % minimum. Cattle will be vaccinated twice annually once in every six months and sheep once a year.

C- The Other Provinces:

Anatolian provinces in which more attention will be given on livestock movements.

Coverage of vaccination in Central Anatolia and Eastern Anatolia Provinces are determined to be 80 % minimum. Cattle will be vaccinated twice a year.

The vaccinations will applied with payment trough the goverment programmes depending on the breeder offers.

D- Disease outbreaks

The principles of FMD control consists of reporting, management isolation and disinfection activities to be performed in the shortest time possible, in other words, to eliminate the disease by using all of the existing sources. Ring vaccination in the outbreak will be carried out. Pathologic materials will be sent for typing in each case.

The other districts within the province and all the neigh bouring provinces will be informed about the disease outbreaks as soon as possible and records will be drawn up in this respect.

E- Livestock Movements

The requirement to the effect that cattle and sheep will have been vaccinated againts FMD two before date ow their dispatch for transport within the country. Will be strictly applied and followed up in 1993 also will be continued. Rules for the necessary discipline will be applied by these concerned who will be duly informed beforehand.

In addition, for an efficient monitoring of livestock movements which play a major role in national economy control stations will be established on the Giresun-Gaziantep line and also on the point of transit from the Marmara to Thrace Region.

Vaccination Programme of 1993

Species	Marmara and Aegean Buffer Zone	The other Provinces	Ring Vaccination	Total
Cattle	3.682.000	19.270.000	*	22.952.000
Sheep and Goats	5.031.000	-	*	5.031.000
TOTAL	8.713.000	19.270.000	*	27.983.000

Foot and Mouth Disease Vaccine Production

Within the frame work of the FMD Control Project FMD Institüte Ankara. In 1991 10.828.460 doses of O_1, 10.828.460 doses A_{22} totally 21.656.920 doses of vaccines were produced.

In 1992 15.434.300 doses of O_1, 13.701.240 doses A_{22} totally 29.135.540 doses of vaccines were produced, 40.000.000 doses of mono valent vaccine has been targeted produce in 1993.

In the production of vaccine O_1 Manisa, A_{22} Mahmatlı Ankara virus strains are used.

Conclusion :

Our relations with FAO, FMD commission is continuing on a very good base for 31 years.

Mutual understanding, collaboration and asistance have been the major factors to control the exotic types of FMD outbreaks in Anatolia and protect Europe from these types.

In consequence of this cooperation, II. phase of "Foot and Mouth Disease project" will be implemented with the cooperation of Ankara Foot and Mouth Institute and U.K Pirtright Institute.

I believe that diagnosis and vaccine production units of Ankara Foot and Mouth Institute will be equipped with ultra-modern equipments of new technology with the assistance of this project.

We would like to thank to the authorities of FMD commission for their continuing supports of vaccine, provided for the campaings carried out on the buffer zones, since 1962 and equipment and training facilities during the set up of FMD Institute Ankara. Besides, We would like to thank to EEC authorities in your presence, for their valuable asistance of equipment and training Provided to Turkey.

* : According to new outbreak

OUTBREAKS OCCURED İN WESTERN BUFFER ZONE (1990 - 1992)

	1990	1991	1992
BALIKESİR	14	21	11
BİLECİK	2	7	1
BOLU	10	4	1
BURSA	4	16	3
ÇANAKKALE	-	-	1
ESKİŞEHİR	3	11	2
İSTANBUL	-	4	-
İZMİR	3	21	33
KOCAELİ	2	5	1
KÜTAHYA	3	5	-
MANİSA	1	11	-
SAKARYA	13	14	11
UŞAK	1	23	2
TOTAL	**56**	**142**	**66**

SEROLOGICAL SURVEY IN EUROPEAN TURKEY, THRACE, 1992.

BACKGROUND

At the Tripartite FMD Group Meeting in Brussels in November 1991 it was proposed that a serological survey be carried out by the WRL in Thrace to ascertain the foot-and-mouth disease (FMD) status following cessation of vaccination in that area in 1989. The objectives were to establish the presence or absence of antibodies to FMD virus type O in FMD susceptible animals. Serum samples from a statistically representative number of cattle and sheep were collected and examined for antibody against FMD virus, type 0_1 using the ELISA. Positive samples were also titrated against the vaccine strain A_{22} Mahmatli and against VIA antigen by the agar gel diffusion precipitation test.

The survey took place between 27th May and 15th June 1992 and results were presented to the Research Group at the session held at Mittelhausern from 8 to 11 September 1992. The group recommended that the sera be tested against FMDV strain A_{22} Mahmatli. This was agreed by the CEC at a meeting held in Brussels on 9 October 1992.

RESULTS OF ASSAYS THE TYPE A ANTIBODIES

The 1822 sera were tested for antibodies against the vaccine strain A_{22} Mahmatli in a liquid phase blocking ELISA as described by Hamblin *et al.* 1987.

One hundred and twenty samples gave titres of between 45 and 90. Fifty-five samples gave a titre of 90 or greater and are listed in Table 1.

Thirty-one samples had titres greater than 100 and were tested for antibodies against VIAA by the agar gel diffusion precipitin test (AGDPT; Cowan and Graves 1966). All samples were negative by AGDPT and this result was confirmed using a VIAA ELISA developed by the WRL, similar in principle to that described by Alonso *et al.* (1990).

DISCUSSION

One hundred and twenty samples gave low titres. False positive results are found in a small percentage of samples tested by liquid phase blocking ELISA in the WRL but without the opportunity for repeat sampling and retesting it is not possible to draw firm conclusions about these results.

Fifty-five samples gave a titre of 90 or greater. Such titres are most likely due to vaccination. Marked clustering of high titre samples occurred in the following areas: Ipsala district in the province of Edirne, Vize and Central districts in Kirklareli and Silivri and Büyükcerkmece in Istanbul province.

Previous contact with FMD virus cannot be ruled out in all cases, for example the high A titre in combination with a negative O titre in sheep 182,372,376, goat 955, cattle 1723 and 1733 (refer Table 1) is suggestive of this. The absence of antibody titres against VIAA would indicate that any such contact was not recent.

CONCLUSION

These results further support the conclusions and recommendations previously made by the Research Group.

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Cowan and Graves, 1966 A Third Antigenic Component Associated with Foot-and Mouth Disease Infection. Virology **30**, 528-540.

Alonso *et al.* 1990 Detection of FMD VIAA antibodies: Comparison of the ELISA and agar gel immunodifusion test. Preventative Veterinary Medicine **9**, 233-240.

TABLE 1

Number	Species	Age	A Titre ELISA	O Titre ELISA	Village	District	Province
66	Sheep	15 mth	90	<32	Çukuryurt	Saray	Tekirdag
73	Cattle	1 yr	90	<32	Bahceykoy	Saray	Tekirdag
101	Sheep	18 mth	355	90	Ğünğormezköy	Saray	Tekirdag
103	Sheep	1 yr	90	<32	Ğünğormezköy	Saray	Tekirdag
182	Sheep	15 mth	724	<32	Yayaağac	Sarköy	Tekirdag
186	Cattle	30 mth	256	45	Çavuskoy	Enez	Edirne
212	Sheep	1 yr	90	<32	Çavuskoy	Enez	Edirne
274	Cattle	2½ yr	90	<32	Karayusuf	Meric	Edirne
352	Cattle	2 yr	90	<32	Pasaköy	Ipsala	Edirne
354	Cattle	2 yr	90	32	Pasaköy	Ipsala	Edirne
359	Cattle	18 mth	90	<32	Pasaköy	Ipsala	Edirne
367	Sheep	18 mth	256	<32	Pasaköy	Ipsala	Edirne
372	Sheep	18 mth	512	<32	Pasaköy	Ipsala	Edirne
376	Sheep	2½ yr	512	<32	Pasaköy	Ipsala	Edirne
403	Cattle	2 yr	128	<32	Koyunyeri	Ipsala	Edirne
404	Cattle	18 mth	181	32	Koyunyeri	Ipsala	Edirne
405	Cattle	2 yr	181	<32	Koyunyeri	Ipsala	Edirne
406	Cattle	2 yr	90	<32	Koyunyeri	Ipsala	Edirne

ANTIBODY TITRES BY ELISA (HAMBLIN *ET AL.* 1987).

RECIPRICOL TITRES AGAINST A_{22} MAHMATLI ≥ 90 ARE LISTED ALONG WITH THEIR TYPE O TITRES FROM THE PREVIOUS TEST.

TABLE 1 (CONT.)

Number	Species	Age	A Titre ELISA	O Titre ELISA	Village	District	Province
407	Cattle	2½ yr	128	<32	Koyunyeri	Ipsala	Edirne
438	Cattle	18 mth	90	<32	Suluca	Keşan	Edirne
442	Cattle	2 yr	90	<32	Suluca	Keşan	Edirne
685	Cattle	20 mth	355	181	Balabankoru	Uzunköprü	Edirne
727	Cattle	2 yr	128	<32	Ömerby	Uzunköprü	Edirne
793	Sheep	18 mth	128	45	Hasboğa	Vize	Kirklareli
803	Sheep	15 mth	90	<32	Hasboğa	Vize	Kirklareli
833	Sheep	18 mth	90	<32	Çüvenli	Vize	Kirklareli
842	Sheep	15 mth	90	<32	Çüvenli	Vize	Kirklareli
848	Sheep	15 mth	90	<32	Çüvenli	Vize	Kirklareli
955	Goat	2 yr	256	<32	Erenler	Pinarhisar	Kirklareli
960	Sheep	15 mth	128	<32	Erenler	Pinarhisar	Kirklareli
1015	Sheep	1 yr	362	90	Yenice	Pinarhisar	Kirklareli
1112	Cattle	2 yr	90	<32	Yüdalan	Central	Kirklareli
1153	Cattle	20 mth	90	45	Deveçatağı	Central	Kirklareli
1158	Cattle	1 yr	128	128	Deveçatağı	Central	Kirklareli
1188	Cattle	16 mth	90	256	Asilbeyli	Central	Kirklareli
1191	Cattle	2 yr	181	45	Asilbeyli	Central	Kirklareli
1233	Cattle	2 yr	90	128	Değirmencik	Central	Kirklareli
1432	Cattle	19 mth	90	45	Taşağil	Babaeski	Kirklareli
1474	Cattle	2½ yr	90	32	Taşağil	Babaeski	Kirklareli
1526	Cattle	15 mth	90	<32	Inece	Babaeski	Kirklareli

ANTIBODY TITRES BY ELISA (HAMBLIN *ET AL.* 1987).

RECIPRICOL TITRES AGAINST A_{22} MAHMATLI ≥ 90 ARE LISTED ALONG WITH THEIR TYPE O TITRES FROM THE PREVIOUS TEST.

TABLE 1 (CONT.)

Number	Species	Age	A Titre ELISA	O Titre ELISA	Village	District	Province
1553	Cattle	1 yr	128	<32	Kurfalli	Silivri	Istanbul
1554	Cattle	2yr	181	<32	Kurfalli	Silivri	Istanbul
1555	Cattle	18 mth	181	<32	Kurfalli	Silivri	Istanbul
1556	Cattle	2yr	128	<32	Kurfalli	Silivri	Istanbul
1559	Cattle	15 mth	181	<32	Kurfalli	Silivri	Istanbul
1567	Cattle	20 mth	181	<32	Kurfalli	Silivri	Istanbul
1579	Goat	15 mth	90	<32	Kurfalli	Silivri	Istanbul
1605	Cattle	1 yr	128	<32	Celtik	Silivri	Istanbul
1682	Cattle	18 mth	128	<32	Tepecik	Büyükcekmece	Istanbul
1684	Cattle	2½ yr	90	<32	Tepecik	Büyükcekmece	Istanbul
1703	Cattle	2½ yr	181	32	Tepecik	Büyükcekmece	Istanbul
1705	Cattle	18 mth	181	45	Tepecik	Büyükcekmece	Istanbul
1723	Cattle	10 mth	1024	<32	Kumburgaz	Büyükcekmece	Istanbul
1733	Cattle	19 mth	512	<32	Kumburgaz	Büyükcekmece	Istanbul
1794	Cattle	2½ yr	128	<32	Seymen	Silivri	Istanbul

ANTIBODY TITRES BY ELISA (HAMBLIN *ET AL.* 1987).

RECIPRICOL TITRES AGAINST A_{22} MAHMATLI $\geq$ 90 ARE LISTED ALONG WITH THEIR TYPE O TITRES FROM THE PREVIOUS TEST.

Appendix 8

Future of the Commission - Discussion Paper

BACKGROUND

1. The European Commission for the Control of Foot and Mouth Disease was established in 1954 by international agreement as an autonomous body within the framework of FAO. Membership, open to all European countries, is acquired by accepting the Constitution of the Commission: the six original members have been joined by 22 others, making the present membership 28. However some countries which at present are members have recently split into a number of smaller units, and may not renew their subscriptions.

2. The Commission was set up under the only Article (XIV) of the FAO Constitution which makes provision for autonomous budgets. Establishment under any other Article would preclude the existence of a separate budget funded by member countries and remove the element of independence which such provision provides.

3. The Commission meets in Rome, annually until 1973 and biennially since then:

- to review the FMD situation, and policies for control and prevention, and
- to decide future activities.

At the biennial meeting an Executive Committee of eight, including a chairman, is elected to direct the activities of the Commission until the next session. The Secretary of the Commission is appointed by the Director General of FAO with the approval of the executive committee, and accommodation for the Secretariat is made available within the Animal Health Service of FAO. A Research Group of specialists is appointed as a standing advisory panel to deal with technical problems: this group holds a laboratory meeting each year, and reports to the Executive Committee and to the biennial session.

4. Member countries undertake to combat FMD, with a view to the ultimate eradication of the disease. They commit themselves to apply suitable quarantine and sanitary measures, and to pursue one of four policies:

- slaughter
- slaughter with vaccination
- the maintenance of a totally immune cattle population by vaccination
- zonal vaccination around outbreaks

5. The general functions of the Commission have been to:

- collect and disseminate epizootiological information about FMD, in collaboration with OIE.

- assist countries in diagnostic work and the organisation of programmes for the control and prevention of disease.

- maintain a register of available stocks of virus.

- observe the evolution of FMD, especially in regions from which the disease could be introduced into Europe by importation or other means.

6. In addition, special functions have been to:

- make provision for the production and/or storage of virus/ vaccines for distribution to member countries in case of need.

- make provision for the establishment of "cordons sanitaires" to prevent spread of disease.

- formulate and implement special projects on the recommendation of the Executive Committee.

7. The administrative costs of the Commission (excluding the facilities provided by FAO) are borne by member countries, who contribute to the administration budget according to a scale decided by the Commission. These contributions are deposited in FAO Trust Fund 42. As well as paying the salaries of the Secretariat the administration budget makes a small contribution to the cost of services that the World Reference Laboratory at Pirbright provides. (A small contribution to FAO/WRL service costs is also made directly by FAO, acting independently of the Commission).

8. Some of the costs of maintaining buffer zones (for example, in Anatolia) and making available emergency supplies of vaccine, are met from two other trust funds, 9111 and 9097, financed by the EC and by non-EC countries respectively. In practice the major contribution has been made by the European Community. Campaign operations have been constantly supervised by a tripartite FAO/EC/OIE committee.

9. The Commission can be abolished, either by 75% of members voting to do so at a general session, or by so many withdrawing that less than 6 members remain, at which point termination would be automatic.

10. The original objectives of the Commission have been achieved: foot and mouth disease has been eradicated from Europe and vaccination discontinued. Apart from one isolated outbreak the continent has been free of FMD since July 1989. Any imported infection should be effectively and quickly stamped out, as happened in Bulgaria in 1991, and vaccine banks are being established or already exist to ensure the availability of vaccine if required for emergency use.

11. Although the risk from within Europe has gone the risk from elsewhere has, perhaps, increased. As a result of the cessation of vaccination the livestock population throughout Europe will soon be fully susceptible. FMD remains endemic in the Middle East and in North Africa, and political instability means that the situation could deteriorate rapidly even in areas where there is now no problem. There is therefore an argument for following a pre-emptive strategy, and attempting to reduce the risk of reintroducing infection by shifting the focus of activity to

countries whose geographical position makes the existence of FMD there a potential threat to Europe.

THE TASK FOR A CONTINUING COMMISSION

12. This paper suggests new aims and objectives which can best be achieved by continuing the present commission. Organisational and other changes which could reduce costs are identified, but it must be recognised that there is no such thing as a Committee or Commission which costs nothing. If countries and organisations are not willing to commit the necessary resources in time, money and expertise there is no point in continuing.

13. The aims of the Commission in future would be to:-

i. monitor the FMD situation in the surrounding area and worldwide, and to disseminate the information obtained;

ii. promote appropriate areas of research; and,

iii. provide a forum to coordinate the prevention and control of FMD in member countries.

14. To meet these aims the following new objectives should be adopted:

- to establish effective surveillance and monitoring of the FMD situation in collaboration with surrounding countries (a more active role than the information gathering and dissemination exercise currently performed by OIE).

- to encourage the development and implementation of policies and strategies to ensure a prompt and effective response to outbreaks of FMD in these countries. Any action proposed outside the territories of member countries would have to be separately funded.

These objectives are additional to those which already exist in respect of action within Europe to prevent and control outbreaks of FMD, and the maintenance of effective vaccination buffer zones, in Europe or elsewhere, to prevent incursions of exotic FMD into Europe.

REDUCING THE COST OF MEMBERSHIP OF THE COMMISSION

15. The Commission's administration budget for 1992 was about US $250,000, and members (with the exeption of the chairman) meet their own travel and subsistence costs when attending meetings. The cost of membership could be reduced by:-

- reducing the size of the administration budget

- reducing the length of general session meetings from the present 4 days

- reducing the size of the executive committee

- arranging general sessions in conjunction with some other meeting at which delegates would be present, instead of in Rome as now.

16. The Commission will continue to be heavily dependent on specialist scientific advice and expertise, and it would be most unwise to disband the Research Group. However, the cost of the Research Group can be reduced if, wherever possible, joint meetings are held with the EC Scientific Veterinary Committee FMD Subgroup, and delegates costs are met by national authorities. The Commission would continue to meet the cost only in special cases.

17. The greater part of the administration budget is accounted for by the salaries and related costs of the Secretary and Administrative Assistant, based in Rome.

18. Significant savings could be achieved by regrading one or both posts at a lower level, by making one or both posts part-time, by discontinuing one of the posts, or by a combination of these actions. The table at Annex 1 gives details of the 1992 budget with the posts as presently graded, and compares the total of US $255,200 with the budget totals based on the assumption of different changes being made. It is possible to reduce the total to:-

Option	1	$205,560	by downgrading both posts.
"	2	$178,220	by downgrading the Secretary's post, making the Secretary part-time and paying only 50% of salary and associated costs of this post.
"	3	$153,840	by downgrading both posts, making the Secretary part-time and paying only 50% of salary and associated costs.
"	4	$136,720	by downgrading only the Secretary's post, but making both Secretary and Administrative Assistant 50% part-time and paying only 50% of salary and associated costs of both posts.
"	5	$124,530	by downgrading both posts and making both 50% part-time.
"	6	$126,500	by retaining only the Administrative Assistant post, at present grade.

The figures represent potential savings of 19%, 30%, 40%, 46%, 51% and 50%.

19. The present Secretary is to retire in May, which makes this an opportune time to consider whether the post can still be justified. It is arguable that the services of a full time Secretary are no longer required, given the present FMD disease-free situation in Europe. A part-time appointment would

create difficulties for FAO, who do not have the financial resources to fund half a professional post, but if in future there was no Secretary scientific/ technical work could be contracted out as required, and a consultant employed on a part-time basis to act as liaison officer to coordinate the activities of contracted bodies and provide a link between those bodies and the Chairman and Executive Committee. This would be a considerable change from the existing situation, and to make it work effectively some continuity would be essential. This would be provided if Miss Raftery were to continue full-time in the post of Administrative Assistant which she now holds. Any contracted-out work and consultancy would have to be paid for, so the 50% saving envisaged in Option 6 would not be realised in practice.

20. Provided that papers for discussion have been circulated in advance, there seems no reason why the general session should invariably spread over four days: the length should be consistent with the agenda to be discussed. A rapporteur could be appointed from amongst those attending the Session, instead of being separately funded by FAO, and the report itself severely curtailed. It may not be essential that a full draft report be prepared and agreed during the meeting, although any recommendations or decisions would need to be formally agreed and recorded. It would suffice for the Secretariat to circulate a draft report to members by post, and prepare and circulate a final report after receiving written comments and corrections.

21. The size of the Executive Committee (at present almost one third of the Commission) could be reduced from the present eight to perhaps five or six, whilst still ensuring that different geographical areas were adequately represented.

22. At present the Commission invariably meets in Rome. It could meet elsewhere, and if it chose to do so the costs to be met by members might be reduced. The European Regional Committee of OIE meets biennially, and meetings of the European FMD Commission could be arranged at the same venue immediately before or after the OIE meeting. There would be no additional travel costs for members, only the extra subsistence expenses. There would, however, be additional costs for the Secretariat, with implications for the administrative budget, and considerable practical problems in making the necessary arrangements.

23. It would seem desirable to retain the existing autonomous position of the Commission and continue establishment under Article XIV of the FAO constitution, activating change by amending the Constitution, Rules of Procedure and Financial Regulations of the Commission where necessary.

RECOMMENDATIONS

24. The fifty-fifth session of the Executive Committee, meeting in Toledo in February, discussed the options set out in this paper, and agreed that the following recommendations be submitted to the thirtieth General Session for approval and adoption:-

i. the Commission should continue in being, operating under Article XIV of the FAO constitution;

ii. the future aims of the Commission should be those set out in paragraph 14 of this paper;

iii. the new objectives should be those set out in paragraph 15 of this paper which are additional to existing objectives;

iv. meetings of the general session should continue to be held biennially in Rome, but should in future be as short as possible consistent with the agenda to be discussed: it is anticipated that under normal circumstances a maximum of three days will suffice;

v. the Executive Committee should continue to have eight members and contain members from different areas;

vi. the Research Group should continue to meet regularly, but costs should be minimised by arranging joint meetings with the EC Scientific Veterinary Committee, and by attendance costs being paid by national authorities other than in exceptional circumstances.

vii. the services of the administrative assistant should be retained, and this post should remain with the Animal Health Service of the Animal Production and Health Division of FAO.

viii. The post of Technical Secretary should lapse when the present occupant retires in May, being no longer required given the present FMD disease-free situation in Europe. Scientific and technical work which has been done by the Secretary should, in future, be contracted out as required to institutions/bodies including, inter alia, the WRL, EC and FAO.

ix. A consultant should be appointed to act as liaison officer to coordinate the activities of the bodies contracted under paragraph viii, and to provide a link between those bodies and the Chairman and the Executive Committee. Employment would be on a part-time basis, not exceeding 20 days per year, and the individual appointed would be expected to be conversant with the current FMD situation worldwide. The post might suit a person who had recently retired from an FMD laboratory, or international or national organisation concerned with the control of FMD.

March 1993

EUROPEAN COMMISSION FOR THE CONTROL OF FMD: ADMINISTRATIVE BUDGET TF 904200
COMPARATIVE FIGURES ACTUAL BUDGET/DRAFT PROPOSALS

Budget 1992		Alternative Proposals						
ITEM	US$	ITEM	Option 1 US$	Option 2 US$	Option 3 US$	Option 4 US$	Option 5 US$	Option 6 US$
Secretary to EUFMD P5/12 An. Health Officer (salary + social benefits + entitlements spouse, one child)	128,700	Secretary to EUFMD	103,440	51,720	51,720	51,720	51,720	
Administrative Assistant G6/12 (salary + soc. benefits + language allowances) no dependents	83,000	Administrative Assistant post	58,620	83,000	58,620	41,500	29,310	83,000
Consumables (fax, phone, stationery, stamps photocopying)) Room rental) Equipment (serv.maint)) PC + software)	provided by FAO free of charge	Consumable (fax etc)) Room rental) Equipment) PC + software)	provided by FAO free of charge					
Recruitment	not applic	Recruitment	not applic					
Duty travel (difference in travel costs for 1992 being met from TF9111 $48,000 and TF9097 $6,000)	10,000	Duty travel (difference in travel costs for 1992 being met from TF9111 $48,000 and TF9097 $6,000)	10,000	10,000	10,000	10,000	10,000	10,000
Contracts (WRL + Collaborative Lab study)	18,000	Contracts (WRL + Collaborative Lab Study)	18,000	18,000	18,000	18,000	18,000	18,000
General Operating expenses	500	General Operating expenses	500	500	500	500	500	500
Research Group - travel and DSA meeting Berne 1992 (approx $14,000 met from TF9111)	15,000	Research Group - travel and meeting Berne 1992 (approx US $14,000) met from TF9111	15,000	15,000	15,000	15,000	15,000	15,000
TOTAL	255,200		205,560	178,220	153,840	136,720	124,530	126,500

Appendix 9

Future of the Commission - FAO Position

One year ago at Pirbright, U.K. during the Fifty-fourth Session of the Executive Committee, the FAO representative made the following statement:

"The foot-and-mouth disease situation so far achieved in Europe is the result of the establishment, operation and joint efforts of the European countries individually and through the FAO European Commission for the Control of Foot-and-Mouth Disease (EUFMD).

Foot-and-mouth disease has been eradicated from Europe since 1989 and vaccination was discontinued from 1.1.1992. The vaccination campaigns in southeastern Europe buffer zone established in 1962 have successfully contained the attacks of exotic FMD virus from the Middle East. The eradication of FMD from Thrace area later permitted the relocation of the buffer zone to western Anatolia.

Europe is now facing the challenge of consolidating the favourable disease situation so far achieved by maintaining the FMD free status and further by strengthening surveillance and monitoring the disease situation in countries surrounding Europe where the disease is still present".

This meeting has already been fully informed about the recent developments of the FMD situation in Europe, particularly in Italy. It is not yet fully clear from where the virus came, and through which countries. The FAO statement at Pirbright suggested the following:

"Therefore, the broadening of the geographical coverage in areas surrounding Europe may have practical and financial implications for the work of the Commission, but it will undoubtedly result in a good investment by protecting Europe through transferring activities beyond the frontiers of Europe.

The recent geopolitical developments in the Near East, including North Africa, and the former USSR have increased the risk of FMD virus introduction into Europe. The isolated FMD outbreak which occurred in Bulgaria in July 1991 was further evidence of the potential threat existing for Europe from these areas and this should be seriously evaluated in order to assess the Commission's future strategy and programme.

In conclusion, FAO's opinion was that:

- there is an urgent need for closer collaboration between European countries on the one hand and neighbouring countries of Asia and the Near East including north Africa on the other hand, to develop appropriate policies and strategies to ensure prompt response to FMD outbreaks in the latter countries particularly for FMD epidemics which extend across national boundaries;

- the Commission should:

  . assess the risk for Europe resulting from the spread of FMD from the neighbouring countries;

  . evaluate the cost/benefit for Europe and for non-European countries of control of FMD and possibly its eradication from neighbouring countries"

We, in FAO, consider this opinion as still valid. Furthermore, we are pleased to note that the Report of the Fifty-fifth Session of the Executive Committee held in Toledo and the last version of the Discussion paper on the future of the EUFMD (March, 1993) have endorsed these views. The proposed aims and new objectives are in line with our thinking.

The positions of FAO and the Executive Committee diverge only in relation to the future structure of the Secretariat. If "there is no such thing as a Committee or Commission which costs nothing" (Para. 12 of the Discussion paper), it is also clear to us that if implemented, recommendations viii) and ix), which eventually might result in some savings, will not allow the achievement of the responsibilities of the Commission. The point of view of the FAO Legal Counsel should also be considered very carefully.

FAO is making available to the representatives of the member countries of the EUFMD a copy of the letter that we sent to the Chairman of the Commission on the 23 March 1993 restating FAO's continuing commitment to the work of the EUFMD and proposing solutions for the continuation of the Commission and its Secretariat.

Our overall view of the problem of FMD in the world is summarised in the paper which was presented at the Executive Committee Meeting in Toledo, and circulated to all Delegates attending the Thirtieth Session.

Letter sent by the Director, AGA, to the Chairman of the Executive Committee following the Fifty-fifth Session of the Executive Committee

23 March 1993

Dear Dr. Stougaard,

The Report of the Fifty-fifth Session of the Executive Committee of the European Commission for the Control of Foot-and-Mouth Disease (Toledo, Spain, 16-18 February, 1993) as well as the latest version of the Discussion paper on the future of the EUFMD have been carefully studied in the Animal Production and Health Division of FAO.

These two documents have been forwarded to the Legal Office and Dr. Stouraitis has today sent you their reply. As you can see, there are two formal problems: some of the proposals would require changes in the Constitution of the Commission, and changes in the Constitution in turn require notification 120 days before the meeting. It seems to me therefore

that if the Commission wishes to consider these proposals it can do so only as a preliminary to voting on them at some later date.

In the meantime, I would like to give you our reaction to the most recent proposals coming from the meeting of the Executive Committee. We appreciate the recognition that, in the interest of continuity and efficiency, the position of the administrative assistant should continue as heretofore. We have, however, strong reservations on the recommendations viii) and ix) (para 24) regarding the future provision for professional management of the Commission's affairs. Our view is reinforced by consideration of the recent FMD events in Italy and eastern Europe.

The aims (article 13) and the new objectives (article 14) clearly require the services of a highly specialized expert as Secretary of the EUFMD. "Contracting out services as required to institutions/bodies" does not seem to be a solution; besides, the emergency situations will certainly not be covered appropriately. I am not convinced that appointing a consultant to act as "Liaison Officer" 20 days a year would be enough to assure coordination and linkage on scientific and technical matters. Furthermore, as mentioned on page 7, line 5 to 8, the savings will be less than 50% and, therefore, the expected financial comparative advantage may not materialise.

For these reasons, it had been my intention to propose an alternative along the following lines:

i) The full time services of the Administrative Assistant to be retained on the budget of the EUFMD as recommended by the Executive Committee;

ii) The FAO Regular Programme and the EUFMD budgets to share on a fifty-fifty basis the post of the Technical Secretary on the understanding that:

- The 50/50 agreement is for two years, and the 1995 Session of the EUFMD Commission will evaluate the results and review the cost sharing arrangement;

- FAO will assign one of its Animal Health Officers to service the EUFMD on a part-time basis. Obviously FAO will allocate these duties to an officer who has recognised expertise in FMD and will communicate his/her C.V. to the Executive Committee of EUFMD prior to effecting the appointment;

- The post will be maintained at P5 level, in order to take into account the increased workload and responsibilities;

However, as we have observed the growing consequences of the current outbreaks here in Italy, I feel that even this arrangement may not be sufficient to cope with the activities which are likely to be required over the next few years. I believe the nature and scale of the

risks now evident would justify the full time commitment of a professional officer, at least for the next two years. I can assure you that with new management in the Division, and in the Animal Health Service, we are determined that the very highest level of management of and service to the Commission will be provided. This can best be guaranteed if an appropriately qualified expert officer can devote his full time to the task. He will of course have the full support of his professional colleagues in the Service, of the Division and of FAO as a whole.

Taking account of all these circumstances, I believe that we should propose to the Commission, as the preferred option for the future, the recruitment on a two year contract of a top level professional to manage the Commission. This position could then be reviewed by the Commission at its next regular meeting.

I would greatly appreciate your comments.

Yours sincerely,

E.P. Cunningham
Director
Animal Production and Health Division

Dr. E. Stougaard
Chairman of the EUFMD
Director General, Chief Veterinary Officer
The Danish Veterinary Service
Frederiksberg C., Denmark

Appendix 10

Financial Report

BUDGET FOR 1993
(Note by the Director-General of FAO)

1993 Administrative Budget

1. In accordance with the Constitution of the Commission and with its Financial Regulation III, the proposed Annual Administrative Budget is presented herewith.

2. The budget estimates have been drawn up in the form established in the Financial Regulations.

3. The proposed Annual Administrative Budget for 1993 totals US$275,835.

4. Under Codes 1101/1300 "Personal Services", the budget estimates for 1993 allow for one P-5 Secretary for 5 months, payments for repatriation and accrued annual leave on his retirement, and appointment of a new Secretary at P4 level, with provision for three months in 1993. Provision is also made for one G-6 Administrative Assistant and temporary conference staff.

5. In addition it is recommended that the following amounts be provided for (a) US$10,000 to cover any necessary travel of the secretariat and the Standing Technical Committee, and (b) US$32,000 towards the World Reference Laboratory representing US$15,000 for annual contribution towards work carried out on behalf of the EUFMD and US$17,000 towards the Collaborative Laboratory Study which is being carried out by the Research Group of the Standing Technical Committee.

6. Attached is the budget for 1993 which covers the annual administrative budget.

Assistance given by FA0

7. Besides the above expenditure, there are services provided by the Organization which have not been included in the cost estimate. Items not charged to the Commission include part-time services of senior officials of the Organization, budgetary and financial services, office accommodation, equipment, supplies of stationery, document processing and publication as well as postal and fax services.

TRUST FUND No. 9042.00 – MTF/INT/011/MUL –
Inter–Regional – European Commission for the Control of Foot–and–Mouth Disease

Status of Contribution due as at 30 April 1993
(expressed in US$)

Member Governments	Outstanding 31/12/1992	Contribution due for 1993	Received up to 30/04/1993	Outstanding 30/04/1993	
ALBANIA	2,213.38 a/	1,300.01		3,513.39	
AUSTRIA	(1.00)	7,800.71	7,800.71	(1.00)	
BELGIUM	0.40	13,000.40		13,000.80	
BULGARIA	3,544.64 b/	3,900.09		7,444.63	
CYPRUS	0.00	1,300.01	1,300.01	0.00	
CZECHOSLOVAKIA	7,037.51	0.00	6,739.43	298.08	1
DENMARK	28.00	13,000.40	13,028.40	0.00	
FINLAND	0.00	7,800.71	7,800.71	0.00	
FRANCE	0.00	26,000.83		26,000.83	
GERMANY	0.00	26,000.83	26,000.83	0.00	
GREECE	3,560.54	3,900.09	3,530.54	3,930.09	
HUNGARY	10,018.55 c/	7,800.71	8,365.74	9,453.52	
ICELAND	0.00	1,300.01		1,300.01	
IRELAND	0.00	3,900.09	3,900.00	0.09	
ISRAEL	0.00	3,900.09		3,900.09	
ITALY	24,074.18	26,000.83	24,074.18	26,000.83	
LUXEMBOURG	0.00	1,300.01	1,300.01	0.00	
MALTA	0.00	1,300.01	1,300.00	0.01	
NETHERLANDS	15.00	13,000.40	13,000.40	15.00	
NORWAY	462.45	3,900.09	4,362.54	0.00	
POLAND	(0.10)	13,000.40	13,000.40	(0.10)	
PORTUGAL	0.60	3,900.09		3,900.69	
ROMANIA	0.00	7,800.71		7,800.71	2
SPAIN	0.00	13,000.40		13,000.40	
SWEDEN	0.00	13,000.40	13,000.40	0.00	
SWITZERLAND	0.00	13,000.40	13,000.40	0.00	
TURKEY	0.00	7,800.71		7,800.71	
UNITED KINGDOM	0.00	26,000.83	25,980.00	20.83	
YUGOSLAVIA	13,257.75 d/	0.00		13,257.75	1
TOTALS	64,212.90	263,910.26	187,484.70	140,637.36	

1 o/s Funds not Called
2 Member as of Feb 1993
a/ of which $ 1,031.55 o/s since 1991 and $ 1,181.83 o/s for the year 1992
b/ o/s contributions for the year 1992
c/ balance o/s contributions at 30/4/1993 $ 1,652.81 due to the different exchange rate applied
d/ of which $ 6,166.19 o/s since 1991 and $ 7,091.56 o/s for the year 1992
Tot dr only

Trust Fund No. 9042.00 - MTF/INT/011/MUL

(A) Income/available resources/project expenditure 1991
(as approved and adopted by the Fifty-fourth Session of the Executive Committee, Pirbright, UK, 7-9 April 1992)

	US$	US$
Cash deficit 1 January 1991		- 17,920
Receipts 1991	217,716	
Interest 1991	214	
Transfer of funds from TF 9097 to meet shortfall	20,000	
Actual resources 1991	237,930	
Less: Expenditure 1991	242,417	
Deficit 1991		- 4,487
Accumulated cash deficit 31.12.1991		[1)*] - 22,407

(B) Income/available resources/project expenditure 1992
(as approved and adopted by the Fifty-fifth Session of the Executive Committee, Toledo, Spain, 16-18 February 1993)

	US$	US$
Cash deficit 1 January 1992		[2)*] -22,398
Receipts 1992	212,013	
Interest 1992	311	
Actual resources 1992	212,324	
Less: Expenditure 1992	227,839	
Deficit 1992		- 15,515
Accumulated cash deficit 31.12.1991		[3)*] - 37,913

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1)* Actual deficit as at 31 December 1991 US$ 42,407
less transfer of funds from TF 9097 US$ 20,000

Deficit US$ 22,407

The Executive Committee at its Fifty-fourth Session agreed that in view of the shortfall in resources under TF9042 the amount of US$ 20,000 temporarily transferred from TF9097 should not be retransferred to TF9097.

2)* due to a computer rounding problem the amount of US$ 22,407 was reduced to US$ 22,398.

3)* Cash deficit as at 31 December 1992:

31.12.90:	US$	17,920
31.12.91:	US$	4,487
less	US$ (see footnote 2)	9
31.12.92:	US$	15,515
	US$	37,913

European Commission for the Control of Foot-and-Mouth Disease
TF 904200 - Breakdown budget/actual expenditure 1991, 1992 - provisional budgets 1993 and 1994

Component	1991		1992		1993	1994
	Budget US$	*Expend. US$*	*Budget US$*	*Expend. US$*	*Budget US$*	*Budget US$*
1101-P5-XII (Secretary)	108,500	118,227	128,700	124,015	55,290	
An.Health Officer x 5 months						
Home Leave (1990/92)	2,500	2,745	-	-	-	
Repatriation travel/accrued annual leave for Secretary	-	-	-	-	36,000	
1101-P4- x 3 months (Appointment of new Secretary)					42,000	
1101-P4- (Secretary) x 12 months						100,000
1300-G6 (Admin. Assistant) x 12 months	67,000	76,483	83,000	80,141	82,545	83,000
Home Leave (biennium 1989/91 & 1991/93)	2,000	1,209	2,000	3,658	-	2,000
- Temporary assistance: (interpreters and support staff Twenty-ninth Session (1991) and Thirtieth (1993))	12,000	6,006	-	-	15,000	-
- Overtime for support staff during Sessions	1,200	1,629	700	-	1,000	500
PERSONNEL TOTAL	193,200	206,299	214,400	207,814	231,835	185,500
2000-Duty Travel Secretariat (Research Group 1991/1992/1994)	27,000	17,542	10,000	4,314	10,000	10,000
3000-Contracts (WRL EUFMD - US$15,000+ US$ 17,000 towards Coll. Lab. Study)	14,089	14,000	18,000	15,000	32,000	32,000
4000-Gen. Operating Expenses	500	405	500	711	2,000	500
SUB-TOTAL	41,589	31,947	28,500	20,025	*44,000*	*42,500*
GRAND TOTAL	234,789	238,246	242,900	227,839	275,835	228,000

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TF 9042 - Projected balance sheet 1993/1994

		1993
Pledged income 1993		US$ 262,610
does not include Czechoslovakia does not include Albania and Yugoslavia does include Romania assumes present contribution level unchanged		
Less cash deficit at 31.12.92		US$ (37,913)
Prior year's pledges not yet collected	US$ 64,212.90	
Less:[1]		
Albania	US$ (2,213.38)	
Czechoslovakia	US$ (298.08)	
Yugoslavia	US$(13,257.75)	
	US$ 48,443.69	US$ 48,444
Less forecast expenditure 1993		US$(275,835)
Balance expected 31 December 1993		US$ -2,694

		1994
Pledged income 1994		US$ 262,610
assumes no new members assumes present contribution level unchanged		
Deficit expected 1 January 1994 to be covered		US$ (2,694)
Less forecast expenditure 1994		US$(228,000)
Balance expected 31 December 1994		US$ 31,916

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[1] Prior year's pledges of US$15,769.21 - covering Albania/Yugoslavia for 1991/1992, and exchange difference on former Czechoslovakia contribution - will probably not be collected and so are not included in income above.

TRUST FUND 911100 MTF/INT/003/EEC Income/expenditure 1992 - proposed budget 1993			
Component	Budget 1992	Expenditure 1992	Proposed budget 1993
1151-Consultant - Ankara FMD laboratory	US$ 150,000	US$ 30,238	US$ 40,000
2000-Duty travel - Tripartite FMD Group	48,000	31,041	16,000
3000-Contracts- serological surveys (2) to ascertain FMD status in Thrace - (WRL)	32,000	45,419[1]	40,000
4000-Gen. Op. Expenses	-	301	-
5000-Expendable equipment - vaccine for emergency outbreaks	150,000	-	100,000
9100-Support costs (6%) on all items except vaccine	13,800	6,420	3,360
TOTAL	393,800	113,419	199,360

Cash balance 1 January 1992 **US$1,283,514**
Interest 1992 **US$ 45,541**
Cash balance at 31 December 1992 **US$1,329,055**
Less expenditure 1992 ***US$ 113,419***

BALANCE **US$1,215,636**

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[1]US$32,014 for first survey to ascertain FMD status in Turkish Thrace following cessation vacc. in 1989; £263 refunded by WRL. Second serological survey (testing sera against FMDV strain A22 Mahmatli) £9,110/US$13,972 paid in January 1993)- £8,997.60 charged against 1992/£112.40 charged against 1993 budget.

TRUST FUND 909700 MTF/INT/004/MUL Income/expenditure 1992 - proposed budget 1993			
Component	Budget 1992	Expenditure 1992	Proposed budget 1993
2000-Duty travel	US$ 6,000	US$ 248	US$ 8,000
5000-Expendable equipment - vaccine for emergency outbreaks	30,000	-	50,000
9100-Support costs (6%) on all items except vaccine	360	15	480
TOTAL	36,360	263	58,480

Cash balance 1 January 1992	**US$101,888**
Interest 1992	**US$ 3,704**
Cash balance 31 December 1992	**US$105,592**
Less expenditure 1992	***US$ 263***
BALANCE	**US$105,329**

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Appendix 11

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