Introduction

1. On the invitation of the Government of Malta, the 17th Conference of the OIE Regional Commission for Europe was held in St Paul's Bay from 24 to 27 September 1996.

2. Ninety-seven Delegates and Observers attended the Conference from thirty-seven OIE Member Countries and four International or Regional Organisations. The Rapporteurs for Items I and II also participated in the proceedings of the Conference. These were Dr R.H. Kimberlin, consultant with the Scrapie and Related Diseases Advisory Service (SARDAS) of the United Kingdom, and Prof. T. Håstein, Head of the Department of Fish Health in the Norwegian Central Veterinary Laboratory and President of the OIE Fish Diseases Commission (Appendix I).

Tuesday 24 September 1996

Opening Ceremony

3. Dr C.L. Vella, Director of Veterinary Service of the Republic of Malta, welcomed Delegates and guests to the 17th Conference of the OIE Regional Commission for Europe and thanked members of staff who had assisted in the planning of the meeting. He stressed the particular situation of Malta regarding the control and surveillance system of animal diseases.

4. Dr N.T. Belev, President of the OIE Regional Commission for Europe, expressed his thanks to the Government Authorities of Malta, and to Dr Vella in particular, for all the efforts expended in the preparation of the Conference. He indicated that over the past two years, since the last Regional Conference in Stockholm, many problems related to the strengthening of the national Veterinary Services of the Baltic countries and those of Central and Eastern Europe, have been solved.

5. Dr J. Blancou, Director General of the OIE, expressed his appreciation to the Authorities of Malta for hosting the Regional Conference. Dr Blancou mentioned that the Regional Commission for Europe had acquired four new Member Countries since its last Conference. He congratulated the Member Countries of Europe on their dynamism, and stressed the OIE's activities in the Mediterranean region, an extremely important zone for animal health matters, due to its geographical location. The Director General then briefly explained the importance of the Technical Items that would be discussed during the Conference and wished the countries of the Region every success with their Conference.

6. The Minister for Food, Agriculture and Fisheries of Malta, the Honourable C. Galea, welcomed all Delegates and guests. He described the new challenges facing the Veterinary Services: trade liberalisation as a result of the GATT and World Trade Organization (WTO) agreements, economic restructuring, and the public's reaction to bovine spongiform encephalopathy (BSE). The Minister stressed that good working relations and trust between the Directors of the national Veterinary Services are the best guarantees for assuring fruitful international cooperation.

7. The texts of the above speeches were distributed to the participants.

Election of the Conference Committee

8. Delegates elected the following Conference Committee:

Chairman:	Dr C.L. Vella (Malta)
Vice-Chairman:	Dr K. Lukauskas (Lithuania)
Rapporteur General:	Prof. A. Shimshony (Israel)

Adoption of the Agenda and Timetable

9. The Agenda and Timetable were adopted (Appendices II and III).

Election of Session Chairpersons and Rapporteurs

10. Chairpersons and Rapporteurs were designated for the technical items and animal health status as follows:

Technical Item I:	Dr P. Dollinger, Chairman Dr V. Caporale, Rapporteur
Technical Item II:	Dr B. Vallat, Chairman Dr B. Naess, Rapporteur
Animal health status:	Dr V.M. Avilov, Chairman Dr S. Chircop, Rapporteur

Animal Health Status of Member Countries

11. Dr Avilov, Chairman of the Session, invited Delegates of Member Countries to report on any changes that had taken place regarding the animal health status of their country during the first half of 1996, and especially since the 64th General Session of the OIE.

12. The animal health situation in the region, summarised according to the written and verbal reports presented to the Conference, and significant points over and above those provided at the OIE General Session in May 1996, were as follows:

List A diseases

Foot and mouth disease

13. In Azerbaijan, two outbreaks of foot and mouth disease (FMD) due to virus type O occurred in February 1996 in two kolkhozes in the Agdzhabedin district.

14. Armenia was confronted with an epizootic of FMD due to virus type O in July 1996 and did not have access to a sufficient stock of vaccine to be able to protect the country's entire livestock.

15. In Turkey, the disease (virus type O) continued to circulate enzootically in Anatolia, where 68 outbreaks were reported between January and May 1996. In May and June 1996, two outbreaks due to virus type O were reported in Kadikoy in the Thrace region of Turkey, in Edirne province, and in Ortakoi in the Lalapasa district. They are believed to have resulted from illegal movements of animals. These outbreaks were declared eradicated in July 1996. A total of 115 outbreaks were reported in 1996 and 9 million animals were vaccinated.

16. In Greece, an FMD epizootic due to virus type O began in the Evros prefecture at the beginning of July 1996. By 20 September 1996, 12 primary and 25 secondary outbreaks had been recorded in this prefecture, leading to the slaughter and destruction of over 1 400 cattle, nearly 4 000 small ruminants and several pigs.

17. In Albania, where the disease had been absent since 1960, an FMD episode occurred in May 1996 in the Korça prefecture (south east of the country). The first case was observed on 3 May 1996 in Drithas village in a former state farm. Subsequently, the disease affected nine other villages (Vloghist, Libonik, Vashtmi, Maliq, Shamolli, Kolanec, Gurisht, Pirg, Terove). The infected animals included 463 cattle, 74 small ruminants and 86 pigs. The virus isolated was related to virus type A_{22} Saudi Arabia/India. The 623 clinically infected animals were destroyed and all susceptible animals in the Korça prefecture and part of the neighbouring prefectures of Pogradec and Devollis were vaccinated (a total of 266 048 animals). The vaccination campaign was completed on 15 August 1996.

18. In the Former Yugoslav Republic of Macedonia, two regions were affected by the disease in June and July 1996: Titov Veles (a single outbreak: Orizari village) and Skopje (17 villages infected). Here, too, FMD virus type A was responsible. The disease was controlled through the slaughter and destruction of 4 369 cattle from the affected villages. Ring vaccination was implemented in the aforementioned two regions: it also included those animals considered most at risk (in border zones and in large farms). By mid August 1996, nearly 120 000 cattle had been vaccinated.

19. In FRY (Serbia and Montenegro), approximately the southernmost quarter of Kosovo was declared infected in July 1996. However, the foot and mouth disease virus has not been isolated. Stamping out was applied and 4 079 animals were destroyed.

20. In Israel, 24 outbreaks due to virus type O have been recorded since the beginning of the year. Genotyping of this virus indicates that it is very similar to strains present

in the Middle East.

21. Dr Y. Cheneau (FAO) presented a comprehensive report on the foot and mouth disease situation in Europe since May 1996, which was prepared by the European Commission for the Control of Foot and Mouth Disease. These documents were distributed to the participants. Dr Meldrum (United Kingdom) and Dr Belev (President of the OIE Commission for Europe) subsequently congratulated the European Commission for the Control of Foot and Mouth Disease, as well as the relevant countries on the control measures taken and stressed the excellent collaboration that exists with the international organisations involved in this fight (FAO, OIE and the European Union).

22. Dr Avilov (Russia) was pleased that the Balkan territories (Albania, Former Yugoslav Republic of Macedonia and the Kosovo region) received considerable aid from international organisations. He, however, indicated that the other European Caucasian countries affected by this disease (Armenia, Azerbaijan, etc.) would also deserve aid, as only Russia has to date given this assistance.

Swine vesicular disease

23. In Italy, three outbreaks of swine vesicular disease were reported, in April and May 1996, in the regions of Calabria, Abruzzi and Molise. All the animals in the affected units were destroyed.

Rinderpest

24. In Turkey, an outbreak of rinderpest was reported in January 1996 in Diyarbakir province (south east of the country) in young fattening cattle held by rural smallholders. The disease is thought to have resulted from the illegal importation of animals. Since the beginning of 1996, 10 million cattle have been vaccinated. Annual mass vaccination is contemplated, combined with serological monitoring of antibody level in cattle throughout the country.

Peste des petits ruminants

25. No case has been reported in Israel since 1993. In view of the situation in neighbouring territories, general vaccination as a preventive measure continues, and 169 000 small ruminants were vaccinated during the first half of 1996.

Contagious bovine pleuropneumonia

26. In Italy, the serological surveillance programme regarding this disease came to an end on 31 December 1995, with satisfactory results.

Bluetongue

27. In Israel, seven outbreaks were reported in 1995, six of which were due to bluetongue virus (BTV) type 16 and one to BTV type 4. The disease usually occurs in autumn. In 1995, a pentavalent bluetongue vaccine was put into use, including type 16, in addition to the traditionally used BTV types 2, 4, 6 and 10. One case, due to BTV type 2, was recorded in July 1996.

Sheep pox

28. In Israel, an outbreak of sheep pox was reported in February 1996 in the Golan district. Vaccination was implemented in the adjacent areas.

29. In Azerbaijan, the disease affected non-vaccinated sheep in two farms in February 1996.

30. In Bulgaria, sheep pox was diagnosed in a farm in the Burgas region in January 1996 and, in July 1996, three outbreaks occurred in the Haskovo region. All the animals, in total 107, in the affected farms were destroyed. The last outbreak occurred in August in one village.

31. In Greece, five outbreaks of the disease were reported in the Evros, Thessaloniki and Larissa prefectures in January 1996. Stamping out was applied in each of the outbreaks. Fourteen additional outbreaks were reported in the Evros prefecture between July and September.

32. In Russia, seven outbreaks were reported in regions located in the south of the European part of the country, from January to April 1996. Three cases occurred from June to September 1996 in the Kalman Republic.

33. In Turkey, preventive mass vaccination was extended in the dense sheep population and the border areas. Twenty-eight outbreaks were recorded from January to September 1996.

African swine fever

34. In Italy, the incidence of African swine fever in the island of Sardinia appears to have declined. From January to date, 62 outbreaks of the disease were recorded (all in the Nuoro province) compared to 111 during the equivalent period in 1995.

Classical swine fever

35. In 1996, Latvia and Slovenia reported the recurrence of the disease in its territory after an absence of several years.

36. In Latvia, where there had been no cases since August 1993, an outbreak occurred in February 1996, in a private farm in the Talsi district. A second outbreak was reported in the Tukums district in April 1996. These incidents are believed to have resulted from the feeding of waste products of wild boar to pigs.

37. In Slovenia, where there had been no cases since 1992, an outbreak was reported in May 1996 in the Domzale municipality, in unvaccinated fattening pigs in a private farm. Twenty-five animals were destroyed.

38. The following countries which reported outbreaks in 1995 have reported further outbreaks since January 1996: Austria, Bosnia and Herzegovina (one), Croatia (seven), FRY (Serbia and Montenegro), Germany, Italy, Moldavia, Slovakia and Russia.

39. In Germany, two outbreaks of the disease occurred in two production units in Brandenburg Land, in January and May 1996. A total of 1 500 pigs were destroyed. In this region, classical swine fever also circulates in the wild boar population.

40. In Austria, two outbreaks of classical swine fever were reported in Lower Austria province in wild boar. The hunting of these animals is actively encouraged.

41. In Bosnia and Herzegovina, one outbreak occurred during the summer of 1996, but it was controlled.

42. In Croatia, seven outbreaks occurred in small family-run farms in the Sisak and Bjelovar departments in February, March and July 1996.

43. In France, 1 645 samples taken from wild boars were examined, and only 8 animals were identified as carriers of specific antibodies in the Vosges department.

44. In Italy, 44 outbreaks were reported from January to date. These involved several provinces in the north of the country and the island of Sardinia. Some of the outbreaks involved wild boar. The Italian Delegation presented a multi-media document during the Conference, summarising the animal health situation in Italy.

45. In Moldavia, an outbreak occurred in five private farms in the north of the country in March 1996. Contact with wild boar is thought to have been the source of infection.

46. In RFY (Serbia and Montenegro), 81 outbreaks have been reported since the beginning of the year, all located in Serbia.

47. In Slovakia, the 16 outbreaks recorded since the beginning of the year are believed to have resulted from contact with wild boar, the use of kitchen waste in porcine feed, and the introduction of pigs from small-scale farms into large production units.

48. In Russia, 16 outbreaks of classical swine fever have been reported since January 1996 in seven different districts. This is only a third of the outbreaks that occurred in 1995.

49. No new outbreaks of the disease have been reported in Bulgaria since August 1995, or in the Czech Republic since December 1995.

Newcastle disease

50. In Finland, the disease reappeared after an absence of over twenty years: in May 1996, an outbreak was reported in the north of the country, at Oulu University, in pigeons used for scientific research. Wild pigeons introduced into the university in March 1996 were the source of infection. The disease forms part of epidemiological surveillance in wild birds. Another outbreak occurred in September 1996 in the zoological park of Helsinki, in an isolated unit of wild birds.

51. In the United Kingdom/Great Britain, where Newcastle disease had not been reported since 1984, an outbreak occurred in pheasants for restocking housed outdoors. The infection was transmitted by wild pigeons. Pigeons are also thought to have been the cause of an outbreak reported in a large-scale egg-production unit in the United Kingdom/Northern Ireland in August 1996.

52. In the Czech Republic, Newcastle disease reappeared after an absence of sixteen years. Two outbreaks (14 individuals in each flock) have been reported in the north of the country since May 1996. The source of infection may have been wild birds or contaminated feed.

53. In Austria, three outbreaks of the disease were reported in Lower Austria and the Styria province, in January, February and April 1996. These were the first outbreaks since 1993. The cases were observed in a backyard poultry flock and in hobby fowl (two outbreaks). Hobby fowl were also affected in the six outbreaks that occurred in Belgium, and in one of the two outbreaks in the Netherlands. In the

latter country, a revalidation centre for wild birds was also affected.

54. In Denmark, a small backyard flock and a large-scale layer flock were simultaneously affected in August 1996, and a flock of 11 000 partridges on 11 September. The three outbreaks were controlled.

55. The other European countries to have experienced outbreaks of Newcastle disease since the beginning of the year are: Belgium, FRY (Serbia and Montenegro), Germany, Italy, Russia (4) and Turkey (5). France reported five outbreaks in the Department of Reunion (an Indian Ocean island), which have now been controlled.

List B Diseases

Anthrax

56. Forty-eight cases were reported in Turkey.

Aujeszky's disease

57. In Sweden, a health prophylaxis programme of the disease in pigs is underway. The number of outbreaks has been decreasing progressively since 1990, with no outbreaks in 1995 and 1996.

Rabies

58. European bat lyssavirus 2 was isolated in a sick bat (*Myotis daubentonii*) found in a port in Great Britain at the end of May 1996.

59. In Belgium, the oral vaccination campaign against rabies in foxes had mitigated success in 1995, due to the demographic explosion of the vulpine population. In 1996, vaccination was intensified, covering 8 800 km^2, with a distribution of 17 baits per km^2. Furthermore, vaccination of young earth foxes was carried out in May 1996. Ninety per cent of the baits (identified by a dental tetracycline marker) were taken. The disease is currently clearly regressing.

60. In Bosnia and Herzegovina, cases of rabies were reported in foxes on the outskirts of Sarajevo.

61. In Israel, the disease essentially retains its sylvatic nature. Of 55 cases reported in 1995, 31 involved foxes and 2 jackals, in comparison with 13 in domestic carnivores. During January-August 1996, 24 cases were reported (14 foxes, 7 dogs, 2 badgers and 1 cat).

62. In Lithuania, two outbreaks were reported in each of six districts in August 1996. An oral vaccination programme of wild animals was carried out in the most endangered administrative districts.

63. In France, nine cases of rabies have been reported near the German/Belgian borders since the beginning of the year. This represents a 71% decrease in comparison with the previous year.

64. In the Netherlands, four cases of rabies were diagnosed in insectivorous bats.

65. In Poland, 1 973 cases of rabies were reported in 1995, of which 1 528 occurred in wild animals.

66. In Hungary, an oral vaccination campaign of foxes is continuing and will be extended as far as the Danube this autumn.

67. In Romania, six cases of rabies have been reported in five foxes and one dog since the beginning of the year.

68. In the Czech Republic, an oral vaccination campaign against rabies in foxes was undertaken in the spring of 1996, during which a total of 767 000 baits were distributed.

69. In Croatia, 349 cases of rabies have been reported since January 1996, of which 325 in wild animals and 24 in domestic animals. Oral vaccination of foxes was carried out in the Primansko-Goranska district.

Paratuberculosis

70. Paratuberculosis was reported in goats in western Norway. Vaccination against the disease is compulsory in affected regions.

71. Three outbreaks were reported in Croatia.

Bovine brucellosis

72. Four outbreaks were reported in Turkey.

Enzootic bovine leukosis

73. As a result of a screening programme of all cattle herds in Norway, a country where the disease had never been reported, seropositive to the enzootic bovine leukosis test was demonstrated in eight dairy herds, though none of the animals had shown any clinical signs of the disease. The seropositive were culled.

74. In Latvia, epidemiological surveillance through ELISA and immuno-diffusion tests showed that of 15 941 cases, 3.2% were antibody carriers. As a result of disease control measures undertaken since 1991, the number of infected animals was reduced by twelve.

75. Since January 1996, two cases were reported in Croatia, and four outbreaks in Romania.

76. In Sweden, the disease has been diagnosed mainly in the south-eastern parts of the country. A voluntary control programme is in force, and 12 000 infected animals are planned to be slaughtered during 1996. The aim of the programme is to declare Sweden free from the disease in 1997.

Infectious bovine rhinotracheitis/infectious pustular vulvovaginitis

77. Three outbreaks were reported in Poland.

78. An eradication programme has been in operation in Sweden since April 1994. Nineteen herds were tested positive.

Bovine spongiform encephalopathy

79. The following list provides a breakdown of the cases of bovine spongiform encephalopathy reported to the OIE in 1996:

- **France: 9 cases (on 12 September) - All the affected cattle were at least seven years old, with the exception of one aged five years.**
- **Republic of Ireland: 33 cases (on 24 September)**
- **Portugal: 23 cases (on 24 September) - The affected cattle were aged between three and seven years. The Delegate regretted that a case of BSE was reported to the OIE in September 1996 as being imported from Germany, whereas the animal was born in Portugal. A complete document on the situation was distributed to the participants.**

- **United Kingdom: 3 736 cases (on 3 May) - The Delegate of the United Kingdom distributed a complete document of the situation in his country.**

- **Switzerland: 35 cases (on 29 August) - The incidence of the disease in this country appears to be declining as, in 1995, 47 cases had already been confirmed by the end of July. A complete document on the situation was distributed to the participants.**

Caprine and ovine brucellosis (not *B. ovis* infection)

80. In Israel, a national control programme was launched in April 1995. Of the 147 291 small ruminants examined, 3.16% showed antibodies, and 12 851 were slaughtered. In 1995, 82 587 females up to 7 months old were vaccinated. The programme is being pursued in 1996: 13 309 animals were compulsorily slaughtered until the end of August.

81. In Turkey, 40 cases were reported from January to August 1996.

Scrapie

82. In 1994 and 1995, 102 brains of sheep showing various neuromotor clinical signs were examined in Israel, all with negative results.

83. In Norway, cases of scrapie have been reported in 21 farms in the south-western part of the country since the beginning of the year. Since 1991, the disease remains confined to the Hordaland and Rogaland districts. A new control programme was launched in May 1996, which encourages the slaughter of animals having come into contact with infected flocks. The industry has withdrawn from the market all meat from contact herds.

84. In Iceland, three cases were reported in 1996. An eradication programme was initiated in 1978 and has been so successful that the disease could be eradicated by the end of the century.

85. In Cyprus, a national control scheme is in operation since 1987. During 1995, the disease was confirmed in 18 new flocks. The total number of infected flocks was 63; 944 sheep and 169 goats were removed and slaughtered. Of 614 sheep and 140 goat brains which were histologically examined, 267 sheep and 37 goats were found positive. An investigation into *PrP* (Prion protein) genotype as a risk factor regarding scrapie in affected flocks in Cyprus is due to start shortly in collaboration with the Central Veterinary Laboratory of Weybridge, United Kingdom.

Equine infectious anaemia

86. The disease was reported in Croatia (13 cases) and Romania (8 cases).

Enterovirus encephalomyelitis

87. The disease was reported in 17 farms in Latvia in 1995, and the number of cases increased by 24.3% in comparison with 1994.

Fowl cholera

88. Three outbreaks were reported in Poland.

Fowl typhoid (Salmonella gallinarum)

89. Six cases were reported in Turkey.

Infectious bursal disease (Gumboro disease)

90. Three new outbreaks were reported in Romania**.**

Viral haemorrhagic disease of rabbits

91. Viral haemorrhagic disease of rabbits occurred in Cyprus for the first time, in April 1996. The disease spread rapidly within the districts of Famagusta, Larnaca, Nicosia and Paphos.

92. One outbreak was reported in Bosnia and Herzegovina, and other sporadic cases in Croatia and Poland.

Spring viraemia of carp

93. One outbreak was reported in Poland.

American foulbrood

94. One outbreak was reported in Poland.

Other Diseases

Infectious salmon anaemia

95. In May and July 1996, infectious salmon anaemia was observed in salmon in six on-growing farms in Norway.

Camel pox

96. Turkmenistan reported four outbreaks of camel pox in February 1996.

Bovine viral diarrhoea

97. Sweden reported that 60% of its dairy herds and 43% of its beef herds are free from the disease.

Item I

Transmissible spongiform encephalopathies in animals and humans: epidemiology, pathogenesis and research aspects

98. Dr R.H. Kimberlin, consultant with the Scrapie and Related Diseases Advisory Services (SARDAS), and Rapporteur for this item, was briefly introduced by Dr P. Dollinger, Chairman of the Session.

99. Dr Kimberlin commenced his presentation by listing the 14 Member Countries that had sent reports on this subject to the OIE, namely, Albania, Belgium, Cyprus, Denmark, Finland, Germany, Israel, Latvia, Lithuania, Norway, Slovakia, Spain, Switzerland and the United Kingdom (UK).

100. Many countries carry out surveillance and monitoring for transmissible spongiform encephalopathies (TSEs): these include bovine spongiform encephalopathy (BSE), Creutzfeldt-Jakob disease (CJD), feline spongiform encephalopathy (FSE), scrapie and transmissible mink encephalopathy (TME). Measures to prevent BSE have been introduced in many countries.

101. The Rapporteur pointed out that the BSE epidemic in Switzerland is nearing its peak and that the UK epidemic is declining rapidly. Recent data indicate an average risk of maternal transmission of BSE to calves of 1%. There may also be a small risk of horizontal transmission to unrelated calves born up to three days after a subsequently affected cow has calved. However, transmission of BSE other than by contaminated feeds will not be sufficient to sustain an endemic infection in cattle. Prevention of feed-borne infection is expected to eradicate BSE.

102. He recalled that 12 cases of a new variant of CJD (vCJD) have been described in the United Kingdom. These cases may be associated with exposure to BSE before measures were taken to protect public health. However, there is no direct evidence of a link, and uncertainty about the epidemiology of sporadic CJD makes it difficult to formulate and investigate other possible sources of vCJD.

103. Feed-borne exposure to BSE may have caused cases of scrapie in sheep. It is conceivable that the BSE agent, or a mutant strain of scrapie, may spread naturally in sheep and eventually pose a risk to humans.

104. Dr Kimberlin stressed that some countries, notably Cyprus and Norway, are attempting to control scrapie. The discovery of polymorphisms in the *PrP* gene that are associated with susceptibility will facilitate research into the epidemiology of scrapie. It may be possible to eradicate the disease by reducing the spread of infection and by breeding sheep that are resistant to the disease. However, research is needed into the possibility of genetically resistant carriers of infection.

105. Some rendering processes have been shown to reduce BSE infectivity by 80-fold. This may not be enough to guarantee the disinfection of bovine waste material containing central nervous system tissue where most of the BSE agent becomes concentrated.

106. The Rapporteur concluded that current methods for detecting modified PrP protein are not sensitive enough to demonstrate the absence of infection.

107. Following the presentation by Dr Kimberlin, the Swiss Delegation showed a video film by Prof. U. Braun, in which BSE symptoms and the clinical tests identifying them, were clearly described: reaction to stimuli by contact, sound, light, study of the gait, etc. The Conference very much appreciated the film, and many participants requested the OIE to distribute copies of the film.

Discussion

108. The Chairman congratulated Dr Kimberlin on his comprehensive and informative presentation, and invited comments and questions from the participants.

109. The French Delegate requested the Conference whether he could present the BSE situation in France showing the low incidence of the disease. Twenty-three cases have been reported since 1991 in 20 million head of cattle, of which 10 million are adults. He described the new measures taken in 1996 to accelerate eradication of the disease:

a. banning of any animal carcasses in animal feed (400 000 tons/year);

b. incineration of specified bovine offal (SBO) at abattoirs (100 000 tons/year);

c. prohibition of ruminant protein for feeding ruminants, apart from that derived from milk;

d. slaughter and destruction of all animals in herds where a case of BSE has been identified, or preservation of their organs in a ‘tissue bank’ to be used for research purposes;

e. removal and destruction of the brains, eyes and spinal cord of all cattle over six months old and of all small ruminants over 12 months old.

110. The epidemiological situation is consistent with the hypothesis that BSE originates from imported feedstuff. Any statistical analysis is, however, rather difficult, due to the low number of cases observed in France (23). In practice, all cases can be connected to the importation of meat-and-bone meals in the 1980s.

111. Dr Liven (Norway) asked in relation to scrapie whether restocking should take sheep genetic information into account. Dr Kimberlin stressed in his reply that at present genotyping is particularly useful in relation to epidemiology. Breeding for resistance to scrapie is possible. It is not simple, however, to decide the effectiveness of genotype selection on disease control. Much more research is needed. It should also be noted that disease and infection are not necessarily the same thing, as is evident from studies in mice.

Certain genotypes may confer resistance to disease, but not to infection. Thus genotyping could even induce problems, as far as control is concerned, and haste should be avoided in this field.

112. The Delegate of Cyprus enquired about the use of two-dimensional electrophoresis (also known as the 'Harrington test' originally used for CJD diagnosis) in BSE and scrapie diagnosis. Dr Kimberlin said that available results with this test show a moderate level of sensitivity and specificity. The test detects a neuron-specific protein and it is not absolutely specific for the disease. This type of test is, in general, useful in diagnosis in the late stages of the disease and may not be very useful for early diagnosis of BSE and scrapie.

113. Dr Belev, President of the OIE Commission for Europe, asked for comments on the United Kingdom (UK) decision recently published in the press, to stop the eradication programme due to the English scientists' finding that BSE appears to be a 'self-limiting' disease, which will disappear within the next five years. Declining to comment on UK government actions, Dr Kimberlin gave his opinion of the paper by Roy Anderson published in the scientific review *Nature*. BSE is not a herd disease, as can be seen from the low incidence within herds and the random pattern of occurrence. Accelerating slaughter would accelerate somewhat the rate of decline of the epidemic, but the effect would be very small and, as shown in the above mentioned paper, is subject to the law of diminishing returns. Slaughter on a limited basis appears to be the best way to deal with the disease, as the cases that are saved will be fewer and fewer. Dr Kimberlin invited Dr Meldrum to comment if he wished.

114. Dr Meldrum, Delegate of the United Kingdom (UK), stated that he wished to separate science from politics, confirming that the UK Prime Minister has decided that selective culling in his country is 'on hold'. As far as science was concerned, this was due to:

a. the recent publication in *Nature*;

b. some preliminary results of the cohort studies that must still be clarified.

Selective culling will not reduce the time for eradication. In any case, it is felt that public health is well safeguarded because animals older than two and a half years are destroyed and do not enter the human food chain. Therefore, no public health risk can arise from beef derived from adult cattle.

115. The delegate of Israel asked for comments on:

a. the new *in vivo* histochemical technique on tonsils developed by the Lelystad laboratory;

b. why scrapie could become a public health problem in the future after more than two hundred years since its discovery;

c. whether ram genetics could help to control scrapie in sheep populations;

d. the relevance of horizontal transmission in BSE;

e. when present testing of the CJD 'new variant' strain in mice would be completed.

116. Dr Kimberlin replied as follows:

a. The answer to the first question is that the problem is how to evaluate the Lelystad test. Modified PrP protein can be detected outside the central nervous system (CNS) in a number of tissues prior to clinical disease onset. However, sensitivity definition is difficult, as there is no reliable 'benchmark', apart from the *in vivo* infectivity test. The latter is, of course, very time consuming. It is difficult to say whether the test could be valuable as a mass screening tool. The Western blot test might be more sensitive.

b. The world of microbiology is constantly evolving. A mutant strain of scrapie might arise at any moment and be selected by a particular genotype of sheep. It could, therefore, be a good idea to eliminate scrapie.

c. Selection of rams to increase the frequency of a desired *PrP* genotype in a flock is an obvious approach.

d. BSE horizontal transmission appears to be possible, within a very narrow time window associated with calving. The odds ratio is not very high and the risk seems to be low. This low transmission rate will not be able to sustain endemic BSE infection.

e. A study on vCJD strain typing has been initiated to determine whether similarity with the BSE agent phenotype exists. At present, there is no evidence of such a connection, but one has to remember that although a positive result would be informative, a negative one would not be conclusive. In any case, one has to wait another year at least.

117. The Delegate of Switzerland stated that at present herds in which a BSE case appears are not eliminated in his country. However, all animals exposed or potentially exposed to BSE as well as off-spring of infected dams will now be removed from the human food chain. At present, countries require meat from free herds. What is a free herd? A definition should be found to facilitate trade.

118. Dr Kimberlin commented that he could not answer the question because case occurrence in the United Kingdom and in Switzerland has been random, usually in herds that had not previously had a case. Many animals become infected when young and are slaughtered before developing the disease, so that some affected herds are never identified. This situation led to the specified bovine offal (SBO) policy, which had to be applied to all animals over six months of age from all herds, whether affected or not. However, as the epidemics decline, it will become easier to define BSE free herds with confidence, but the decision must be pragmatic.

119. The Delegate of Finland enquired about the risk of 'BSE in sheep' for public health, and whether the use of bovine spinal cord in non-ruminant feed might represent a risk. Dr Kimberlin replied that of all bovine tissues CNS represents a much higher risk than anything else. Near the clinical stage, the difference of infectivity between CNS and non-CNS is very large. Therefore, to use CNS without treatment means running a risk, whatever species is fed.

120. 'BSE in sheep' is a very low public health risk. Sheep are susceptible to BSE by the oral route. A recent paper showed that one sixth of sheep fed with BSE infected brain became diseased, and an agent with the BSE phenotype was observed in the spleen. This raises the theoretical possibility that the BSE agent may be transmitted naturally in sheep. The issue is not whether BSE can be transmitted to sheep orally, but whether it can become endemic to sheep populations. The amount of concentrated feed used in sheep is much lower than in cattle. Although originating from sheep, BSE is now cattle adapted and, therefore, would have to re-adapt to sheep. Given the low exposure rate and even a small species barrier, only a small number of exposed animals would probably get infected and the rate of natural spread would be very much slower than that observed with the feed-borne epidemic of BSE in cattle. In any event, sheep heads have been taken out of the human food chain in the United Kingdom.

121. To the remark of the Delegate of Austria concerning the importance of BSE in terms of public health and the necessity of accelerating eradication, Dr Kimberlin stressed that other BSE-like diseases, such as transmissible mink encephalopathy (TME) and Kuru, were 'self-limiting' diseases. Notwithstanding extensive outbreaks of TME, the disease was always self-limiting, as it was linked exclusively to feed-borne exposure. The evidence suggested that the same reasoning should be applied to BSE.

122. A member of the Delegation of Norway asked the advice of Dr Kimberlin regarding the definition of BSE or scrapie-free herds and countries, and on the organisation of monitoring and surveillance programmes. He also enquired about the benefit that could be expected from such programmes.

123. Dr Kimberlin replied that some monitoring is definitely better than none. At present, some countries are without a doubt infected and few are without a doubt non-infected. The status of the majority, however, is unknown. Conventional monitoring, based on statistical sampling with the objective of excluding disease presence is not feasible, due to the very high number of samples required. There are, however, ways of focusing monitoring, using more tests than simply clinical observation, i.e. histopathology, immuno-cytochemistry, etc. One can ignore lambs and concentrate on older animals of over two years of age, and on old ewes with neurological disease. Targeting cases of neurological disease will optimise disease surveillance. Only countries able to sustain a long-term surveillance effort, could reasonably be considered free from the disease. History shows that disease has been spread by animal movement, for example, from Great Britain to North America after the Second World War.

124. The Delegate of France requested comments on the following fact: in the United Kingdom, before the decision to destroy all SBOs, these could have been included in pet food. Why had 70 cases of encephalopathy been reported in cats, but none in dogs? The answer is probably a difference in the species

barrier. Even 70 cases in seven years in about seven million cats is a very low incidence. The difference from BSE in cattle is that in cats, there has been no recycling of the infectious agent and there would be a species barrier between cattle and cats.

125. The Delegate of the United Kingdom requested the floor to allow him to give some information on ongoing research into the TSEs. Strain typing was top of the agenda together with projects intended to determine whether the agent of BSE could be present in brain pools obtained from scrapie affected sheep. Another project was under consideration to develop a mouse carrying the bovine *PrP* gene. Further attack rate studies were under way and inoculation of material obtained from cattle in these studies to other cattle to verify the absence of infectivity in certain key tissues. A source of scrapie free sheep was also being pursued together with studies into the epidemiology of scrapie to underpin any scrapie control and eradication programme. Work was continuing on the development and validation of BSE and scrapie diagnostic tests for use in live animals in collaboration with workers in both the United States of America and Europe, and also on some aspects of the survival of the TSE agents in the environment.

126. The Delegate of Belgium asked whether the 13 positive animals born to BSE negative dams shown in the cohort study of maternal transmission were born before or after the feed ban. He furthermore asked whether it was justified to incinerate the SBOs in low incidence countries. Dr Kimberlin replied from memory that about 15% of all BSE cases in the United Kingdom were born after the feed ban, and that the 13 cases were probably infected via feeds. The SBO ban has only one aim: to reduce the risk for humans, but, to be effective, it has to be applied to all cattle over six months of age. The vast majority of tissues removed from the food chain in the United Kingdom is negative, but the removal of tissues is not related to the number of cases of BSE reported in a given country. Is this reasonable in terms of the risk for humans? No, but in the present climate of public concern, it is difficult to do otherwise.

127. The Delegate of France stated that in his country, until the non-transmission of BSE to humans is an absolute certainty, the most strict measures will be taken to reassure consumers.

128. In drawing the session to a close, the Chairman thanked all those who had participated, and nominated a small group consisting of Dr E. Liven (Norway), Dr A.A. Panin (Russia), Dr J. Schmidt (Switzerland), Prof. A. Shimshony (Israel) and Dr B. Vallat (France), to assist Dr Kimberlin to draw up draft recommendations on the technical item of this Session.

Wednesday 25 September 1996

Item II

Surveillance and control of marine fish diseases

129. Prof. T. Håstein, Head of the Department of Fish Health in the Norwegian Central Veterinary Laboratory, President of the OIE Fish Diseases Commission and Rapporteur for this item, was briefly introduced by the Session Chairman, Dr B. Vallat.

130. Prof. Håstein described some of the anatomical and immunological features of fish that distinguish them from terrestrial animals and provided information on diseases of socio-economic importance in marine fish world-wide.

131. The Rapporteur then gave a brief overview of the main disease problems in European mariculture based on information received from the Member Countries of the Office International des Epizooties.

132. He mentioned the basic components for disease surveillance in fish with emphasis placed on the establishment of a reporting system and a health control monitoring system.

133. The Rapporteur underlined the need for a legislative framework, giving examples of existing legislation as well as measures to be used in disease surveillance programmes for fish. Such measures include actions to be taken when a notifiable disease/disease agent is detected, as well as quarantine measures, confirmatory diagnostic procedures and methods of control.

134. There are many approaches to controlling diseases in mariculture. These include clearly defined procedures for inspection and health control in fish farms, import regulations, quarantine measures, regulations regarding the introduction of fish species into new areas, transport regulations, restrictions on fish movement, disinfection procedures, defined procedures for dealing with outbreaks of serious transmissible diseases, including eradication procedures (i.e. stamping out), sanitary slaughtering and vaccination strategies.

135. Prof. Håstein continued by naming several on-the-farm factors, which can diminish the risk of disease in marine fish farm establishments. These include localisation (site selection), distance between farms, health control, health certification, certification of fish transfers (transportation), division of year classes, isolation and sanitation in connection with disease outbreaks, regionalisation, sanitary slaughter procedures and disinfection of offal/wastewater in connection with slaughtering.

136. He subsequently spoke on factors that improve the ability of fish to withstand disease, with special emphasis on selection of disease free brood stock, disease control through genetic improvement and vaccination.

137. Prof. Håstein concluded by listing the major drugs used in fish farming.

Discussion

138. The Session Chairman, Dr Vallat, warmly thanked Prof. Håstein for his very comprehensive presentation and invited questions from the floor.

139. Dr P. Dollinger (Switzerland), in opening the discussion, asked whether the application of chloramphenicol, as mentioned in Prof. Håstein's talk, is of any substantial use today. Prof. Håstein replied that chloramphenicol is not widely used, but that a few countries report some use. He furthermore indicated that restrictions should be applied to the use of chloramphenicol in aquaculture. Dr Dollinger then enquired whether fish disease 'M74' is found in many countries. Prof. Håstein stated that this disease condition has been reported in all countries in the Baltic area.

140. Prof. G. Giorgetti (Italy) informed the Conference that an International Workshop on Aquaculture Application of Controlled Drug and Vaccine Delivery will be held in Udine, Italy, from 21 to 23 May 1997. Details on the workshop would be distributed to relevant institutions in the near future. He then stressed that vaccination in fish farming may be used not only for diseases that are widely spread, but also for

diseases that represent special problems in single farms, for example, streptococcosis, when the strain changes from time to time. The use of killed autovaccines may in such situations be of great importance. Prof. Håstein added that it is up to the authorities in each country to decide on the vaccination strategy to be followed.

141. The Delegate of Germany enquired about possibilities for detecting the viral nervous necrosis (VNN) virus. Prof. Håstein stated that, so far, there is no cell line available for cultivation of the virus. Polymerase chain reaction technique is used in some laboratories for virus detection in disease control.

142. The Delegate of Norway commented that appropriate legislation is a very important tool in fish disease control. He informed the participants that the fight against infectious salmon anaemia in his country was planned and carried out with very little known on the nature of the infective agent. Based on general sanitary hygienic principles, the eradication programme for this disease was successful.

143. A member of the Delegation of Malta stressed the importance of VNN and reported that the disease can be spread both vertically and horizontally. He subsequently asked whether an ELISA technique had been set up for the detection of VNN. Prof. Håstein responded that no test had been developed. He emphasised that, for example, in Norway, immunohistochemistry is used with good results using antibodies produced in Japan or France.

144. The Delegate of Sweden enquired whether the stability of the VNN virus in the environment is known and whether the virus is found in salmonids. Prof. Håstein stressed the need for more research, especially concerning the conditions under which the virus can survive outside fish. So far, the virus has not been described in salmonids.

145. The representative from the European Federation of Animal Health (FEDESA) thanked Prof. Håstein for a very comprehensive report and agreed that national disease surveillance programmes based on a good legislative framework are necessary for good control programmes. The drug industry is fully aware of possible side effects of massive use of non-licensed drugs. Official marketing authorisation and controlled responsible use of medicines will thus be necessary in every country with a fish farming industry as part of the control programme.

146. The Session Chairman concluded by thanking all the participants, and then requested a small group consisting of Prof. G. Giorgetti (Italy), Dr Saara Reinius (Finland), Dr J. Rimeicans (Latvia), Dr Angele Casha (Malta) and Dr A. Le Breton (Malta), to draft the recommendation on this technical item under the Chairmanship of Prof. Håstein.

The role and responsibility of Veterinary Services in respect of certification based on information provided by the production system

147. Dr K.C. Meldrum, Chief Veterinary Officer at the United Kingdom Ministry of Agriculture, Fisheries and Food, was briefly introduced by the Session Chairman.

148. Dr Meldrum outlined the Twelve Principles of Certification, which have been endorsed by the OIE and by the British Royal College of Veterinary Surgeons, using overhead slides.

149. The Principles of Certification cover all aspects of the issuing of a certificate by a veterinarian, from the veterinarian's own knowledge of the matters to be certified, to the form, language and signing of the certificate.

150. Dr Meldrum emphasised the difficulties in providing either retrospective or prospective export guarantees and area clearance for diseases which were not notifiable and where there was no available official information. He discussed the health guarantees that could be provided for the farm of origin based either on an owner's declaration or routine and documented veterinary visits to the establishment. He concluded by emphasising that trust between trading countries must be based on openness and transparency, and all our actions should be guided by the Twelve Principles of Certification.

Discussion

151. The Chairman thanked Dr Meldrum for his informative presentation and invited questions from the participants.

152. The Delegate of Sweden confirmed that he accepted the 12 principles presented. However, he raised the question of whether information derived from the producer/owner of the animals to be certified should be required in writing. Dr Meldrum confirmed that declarations should be received in writing and retained by the certifying veterinarian for some time thereafter as a matter of prudence.

153. The Delegate of Norway asked whether the 12 principles presented were reflected in currently used certificates required by the United Kingdom Veterinary Services. Dr Meldrum stated that the principles were aspirations at this time, but every effort was being made to apply the principles into practice both in the United Kingdom and also within the European Union (EU). They were reflected in the *Guide to Professional Conduct* adopted by the veterinary profession in the United Kingdom. He stressed the importance of transparency in the application of certification both in the countries of export and destination.

154. The Delegate of Russia supported the 12 principles, stressing the need for mutual trust of the certification issuing authorities. However, he commented on the difficulty with which his country was confronted when dealing with individual EU member countries, which do not take into account the immensity of the territory of the Russian Federation that extends from the Polish border to Siberia. These countries referred him to EU general policy and directives. In his opinion, the European Union itself is not considered as a single territory regarding animal disease surveillance and certification. Dr Meldrum confirmed that the matter raised real problems, and agreed that although the EU tries to function in a coordinated manner, countries should be able to discuss veterinary certification directly and bilaterally, and enhance better communication to overcome particular difficulties.

Presentations by International Organisations

Food and Agriculture Organization of the United Nations

155. Dr Y. Cheneau of the Animal Health Service, Food and Agriculture Organization of the United Nations (FAO), evoked the presentation he gave on foot and mouth disease in Europe during the session on the animal health situation. The paper had been prepared by Dr Y. Leforban, Secretary of the European Commission for the Control of Foot and Mouth Disease (EUFMD) based in Rome. He drew the attention of the European countries to the dangerous development of one disease in Côte d'Ivoire, namely African swine fever. He stressed that the fight against this disease required international cooperation.

Presentations by other Organisations

European Federation of Animal Health

156. As an invited observer at the Conference, Dr J. Vanhemelrijck, Secretary General of the European Federation of Animal Health (FEDESA), reported on the activities of FEDESA, an organisation that represents the animal health industry in Europe.

157. The animal health industry is committed to maintaining and promoting the health and welfare of livestock and companion animals through the supply of high-quality veterinary products. In order to ensure this goal, FEDESA negotiates constructively with European legislative bodies and regulatory authorities, to ensure sound, realistic policies for veterinary medicines.

158. FEDESA also plays a crucial role in its policy of communication, providing information on the professional standards applied by the industries involved in food production.

159. Dr Vanhemelrijck then briefly reviewed FEDESA's commitment to the environment, animal health, consumer protection and scientific innovation.

160. Dr Vanhemelrijck concluded by stressing that the animal health industry is a key to the maintenance of future food supplies in a growing world and also a catalyst to world trade. Through COMISA, the world-wide animal health industry federation, FEDESA is engaged in a global campaign to ensure animal health food safety and a plentiful supply of healthy food products of animal origin throughout the world. Dr Vanhemelrijck listed the organisations with which FEDESA cooperates, including international organisations, the European Commission, the European Pharmacopoeia Commission, European federations representing industries, professional and consumer associations, as well as the national authorities of individual countries.

Fédération Equestre Internationale

Sanitary measures for international equestrian events

161. Dr F. Sluyter, Official Veterinary Officer of the Fédération Equestre Internationale (FEI), reported that the FEI is experiencing an increasing amount of problems in the international movement of horses to international equestrian events due to health requirements that are originally destined to permanent import of horses.

162. As already recognised by the OIE, horses that compete internationally represent a specific group, which could justify a specific set of health requirements, thus substantially facilitating the organisation and development of international equestrian competitions.

163. Dr Sluyter subsequently outlined the health requirements of horses competing on an international level, and concluded that these horses do not at all pose the same health risk as horses from other categories.

164. He informed the Conference that the FEI prepared a Recommendation regarding the sanitary measures for international equestrian events. The Recommendation requests OIE Member Countries to apply the least restrictive measures possible to international competition horses, with the aim of facilitating participation of a maximum number of horses.

165. In conclusion, Dr Sluyter proposed a draft Recommendation on sanitary measures for international horse events.

Discussion

166. The Chairman thanked Dr Sluyter for his informative presentation, and gave his agreement to the distribution of the draft Recommendation on sanitary measures for international horse events.

Presentation and discussion of draft Recommendations Nos 1, 2 and 3

167. Draft Recommendations Nos 1, 2 and 3 were put forward for discussion. Several Delegates called for changes to be made in Recommendations Nos 2 and 3. On the request of the Delegate of Ireland, who spoke in his capacity as a representative of the European Union, after a long discussion and with the agreement of the other participants, draft Recommendation No. 1 was put aside for re-examination on Thursday, 26 September.

Date, venue and agenda items for the 18th Conference of the OIE Regional Commission for Europe

168. The President of the Conference asked the Delegates if any country would like to host the 18th Conference of the Commission. On behalf of the Government of his country, the Delegate of the Czech Republic invited the Commission to hold its next meeting in Prague. The invitation was unanimously accepted and applauded by all participants. The exact date was not fixed, but Delegates agreed upon the month of September 1998.

169. Several proposals for technical items were presented for the next Conference by the Delegates of the Czech Republic, Finland, France, Norway and Sweden:

- The role of international trade with animals, animal products and feed in the spread of transferable antibiotic resistance and possible methods for control of the spread of infectious resistance factors
- Mycobacteriosis in farm animals
- Surveillance and control of epizootic diseases in wildlife
- The risk of brucellosis in farm animals
- The control of the fox population by immunocontraception

170. After an exchange of views, it was decided that the two technical items would be selected from among those proposed, during the next meeting of the Commission in Paris in May 1997.

Thursday 26 September 1996

Field trip

171. Participants greatly enjoyed the boat trip organised by the host country to fish farms.

Continued discussion on Recommendation No. 1

172. A second draft Recommendation No. 1 was distributed to the Delegates, who discussed it in great detail and requested further modifications.

Friday 27 September 1996

Adoption of the draft Final Report and Recommendations

173. The Conference adopted the draft Final Report pending certain amendments, and approved Recommendations Nos 1, 2 and 3 (Appendices IV, V and VI).

Closing Ceremony

174. Dr Blancou noted the conclusions to be drawn from the proceedings of the Conference and praised its success and the interest of the technical items chosen by the Commission. The Conference allowed in-depth discussions on several subjects of great importance to the region, and has suggested practical solutions to various current problems. While the health situation in Europe remains one of the best of the five regions of the OIE, some sensitive areas persist, notably with regard to foot and mouth disease and transmissible spongiform encephalopathies.

175. The Director General sincerely thanked Dr Vella for his remarkable efficiency in organising and presiding over the Conference. He complimented the Rapporteurs of the technical items and the Chairpersons and Rapporteurs of sessions and thanked them for their unremitting work. Special thanks were also expressed to the Conference Secretariat, and notably Dr Vella's team, and to the interpreters for their admirable work.

176. Lastly, Dr Blancou expressed his gratitude to the Delegation of the Czech Republic for having invited the Commission to hold its next Conference in Prague.

177. The President of the Regional Commission joined the Director General in complimenting and praising the participants for the high professional level and competence of the Conference. He expressed his gratitude to the Host Country, in particular Dr Vella, and to all those who had contributed to the success of the Conference. Dr Belev read out a motion of thanks to the Government Authorities of Malta for their warm welcome and hospitality (Appendix VII).

178. In conclusion, Dr Belev thanked the Delegation of the Czech Republic for proposing to host the next Regional Conference.

179. The Delegates unanimously approved the motion of thanks to the Government of Malta, expressing their gratitude for the excellent welcome offered to them and for all the facilities provided.

180. Dr Vella praised the spirit of scientific openness, involvement and solidarity which was present throughout the Conference, and the hope raised by the Conference for reinforced links of cooperation between all European countries. He expressed his thanks to Dr Blancou and Dr Belev for their cooperation and support.

181. The 17th Conference of the OIE Regional Commission for Europe was declared officially closed at 11.00 a.m.