



EUROPEAN COMMISSION  
HEALTH & CONSUMER PROTECTION DIRECTORATE-GENERAL  
Directorate F - Food and Veterinary Office

DG(SANCO)/3342/2001 – MR Final

FINAL REPORT OF A MISSION

CARRIED OUT IN URUGUAY

FROM 25 TO 29 JUNE 2001

IN ORDER TO EVALUATE THE SITUATION WITH REGARD TO OUTBREAKS  
OF FOOT AND MOUTH DISEASE

*Please note that factual corrections provided by the Competent Authority have been inserted in the text of the report in bold italic type. Comments provided by these authorities which seek to clarify their position are given as footnotes in bold italic type.*



22/08/01 - 49911

## TABLE OF CONTENTS

1.	INTRODUCTION .....	5
2.	OBJECTIVES OF THE MISSION.....	5
3.	LEGAL BASIS FOR THE MISSION.....	6
4.	BACKGROUND .....	6
4.1.	Summary of previous mission findings and follow-up in respect of the animal health situation .....	6
4.2.	Background to present mission.....	9
5.	MAIN FINDINGS .....	10
5.1.	Competent authority controls (FMD) .....	10
5.2.	Action taken to control outbreaks.....	11
5.3.	Identification of animals .....	14
5.4.	Movement Controls .....	15
5.5.	Vaccination programme.....	17
5.6.	Uruguayan import controls .....	19
5.7.	Laboratories .....	21
5.8.	Controls at slaughter .....	22
5.9.	Certification .....	24
6.	CONCLUSIONS .....	25
6.1.	Competent authority controls.....	25
6.2.	Action taken to control outbreaks.....	25
6.3.	Identification of animals .....	25
6.4.	Movement controls .....	25
6.5.	Vaccination Programme .....	25
6.6.	Uruguayan import controls .....	25

6.7. Laboratories .....	25
6.8. Controls at slaughter .....	26
6.9. Certification .....	26
7. CLOSING MEETING .....	26
8. OVERVIEW .....	27
9. RECOMMENDATIONS.....	27
9.1. To the competent authorities of Uruguay .....	27
9.2. To the Commission Services .....	28
ADDENDUM TO MISSION REPORT DG(SANCO)/3342/2001 .....	29

## **Abbreviations & special terms used in the report**

BIP	Border Inspection Post
CA	Competent Authority
CCA	Central Competent Authority
CVO	Chief Veterinary Officer
DC	Departamento de Campo (Field Veterinary Services)
DCI	Departamento de Control de Comercio Internacional (Department of Control of International Trade)
DGSG	Dirección General de Servicios Ganaderos (General Directorate of Stock-farming)
DICOSE	División de Contror de Semovientes (Division of Movement Controls)
DILAVE	División de Laboratorios Veterinarios (Division of Veterinary Laboratories)
DPS	Departamento de Programas Sanitarios (Department of Sanitary Programmes)
FMD	Foot and mouth disease
FVO	Food and Veterinary Office
LDCC	Local Disease Control Centre
MS	Member State
MGAP	Ministerio de Ganadería Agricultura y Pesca (Ministry of Livestock, Agriculture and Fisheries)
OIE	Office International des Epizooties (World Organisation for Animal health)
OMS	Organización Mundial de la Salud (World Health Organisation)
OPS	Organización Panamericana de la Salud (Panamerican Health Organisation)
PANAFTOSA	Pan American Foot-and-Mouth Disease Centre
VIAA	Virus Infection Associated Antigen
SINEASA	Sistema National de Emergencia Sanitaria Animal (National System for Animal Health Emergencies)

## **1. INTRODUCTION**

The mission took place in Uruguay from 25 to 29 June 2001. The mission team comprised three inspectors from the Food and Veterinary Office (FVO) and one Member State expert.

The mission was undertaken in response to an epidemic of Foot and Mouth Disease in Uruguay.

The inspection team was accompanied at each location visited during the mission by representatives from the CCA, the Ministry of Livestock, Agriculture and Fishery (MGAP).

An opening meeting was held on 22 June 2001 with the CCA (MGAP). At this meeting the inspection team confirmed the objectives of, and itinerary for, the mission, and additional information required for the satisfactory completion of the mission was requested.

## **2. OBJECTIVES OF THE MISSION**

To review and evaluate a) the measures taken by the Uruguayan authorities to control Foot and Mouth Disease and b) the animal health certification of fresh meat and offal destined for the EU, in the framework of Council Directive 72/462/EEC<sup>1</sup>, Council Directive 96/93/EC<sup>2</sup> and Commission Decision 93/402/EEC<sup>3</sup>.

In particular, attention was paid to:

- the action taken by the national authorities to control outbreaks of FMD, including vaccination, movement controls and procedures for the destruction and disposal of infected animals.
- the measures taken to trace and prevent the further spread of FMD.
- the state of preparedness of the Uruguayan authorities and the implementation of the FMD contingency plan and the vaccination programme.
- Controls over the production and certification of fresh meat intended for export to the EU.

In pursuit of this objective, the following sites were visited:

---

<sup>1</sup> O.J. L 302, 31/12/1972, p. 28

<sup>2</sup> O. J. L 13, 16/01/1997, p. 97

<sup>3</sup> O. J. L 179, 22/7/1993, p. 11

COMPETENT AUTHORITY VISITS			Comments
Competent authority	Central	1	
	Zonal office	2	
OTHER SITES VISITED			Comments
LDCC		1	
Farm		1	
Abattoir		1	
BIP & State border		2	
Laboratory		1	A meeting with PANAFTOSA representatives took place on 24 June
Road blocks		2	

### 3. LEGAL BASIS FOR THE MISSION

The mission was carried out under the general provisions of Community legislation and, in particular:

Council Directive 72/462/EEC of 12 December 1972 on health and veterinary inspection problems upon importation of bovine, ovine and caprine animals and swine, fresh meat or meat products from third countries, in particular Article 5.

Council Directive 96/93/EC of 17 December 1996 on the certification of animals and animal products.

Commission Decision 86/474/EEC<sup>4</sup> of 11 September 1986 on the implementation of the on-the-spot inspections to be carried out in respect of the importation of bovine animals and swine and fresh meat from non-member countries

Commission Decision 98/140/EC<sup>5</sup> of 4 February 1998 laying down certain detailed rules concerning on-the-spot checks carried out in the veterinary field by Commission experts in third countries

### 4. BACKGROUND

#### 4.1. Summary of previous mission findings and follow-up in respect of the animal health situation

Two missions have been carried out in Uruguay since January 2000 in respect of the animal health situation.

---

<sup>4</sup> Official Journal L 279, 30/09/1986 p. 0055 - 0056

<sup>5</sup> Official Journal L 038, 12/02/1998 p. 0014 - 0016

The first mission was carried out in January 2000, for the purpose of evaluating the veterinary services and the animal health situation (mission ref. DG(SANCO)/1016/2000 MR Final).

An outbreak of FMD occurred in October 2000, although Uruguay had been classified by the OIE as free of FMD without vaccination since 1996, and an FVO mission took place in January 2001 (DG(SANCO)/3177/2001 MR Final) on the controls over the animal health situation and the certification of fresh meat and offal to the EU.

Reports can be found on the DG SANCO Web site: [http://europa.eu.int/comm/food/fs/inspections/index\\_en.html](http://europa.eu.int/comm/food/fs/inspections/index_en.html). Information about the main features of the Veterinary Services, including the structures and a description of the animal movement control system in place can be found in the above reports.

The main findings of the previous missions were as follows :

#### *4.1.1. Holding registration, animal identification and movement controls*

Due to close co-operation between the animal health services, DICOSE and the police, a comprehensive system of herd registration and movement controls was operated with a high level of efficiency.

The system did not, however, identify individual animals. It was therefore not possible to state with certainty, for any animal or group of animals, that it originated from a defined area, herd or flock.

#### *4.1.2. Certification*

The team noted, in the abattoirs visited, a lack of documentary guidance on animal health matters, even though the certification procedure required that certain animal health guarantees were given by public health veterinarians; and concluded that the level of routine co-operation between the two divisions was less than optimal.

Insufficient attention was paid to ensuring that public health veterinarians operating in export-approved abattoirs were provided with positive assurances that the animal health guarantees which were included in the European Union certificates were met in respect of the animals coming into the premises for slaughter for export.

#### *4.1.3. Laboratory service*

The central laboratory was efficiently managed and the scientific staff were competent and knowledgeable.

At the time of the mission, the budget for 2000 had not been released as changes in the law required self finance through commercial activity. As a result, no routine research and surveillance activities were scheduled due to lack of finance.

#### *4.1.4. Animal health controls*

The outbreaks of FMD occurring in Argentina and Brazil in the middle of 2000 had led to the introduction by Uruguay of elaborate precautions at the borders with these two countries. This meant that when the outbreak did occur in Artigas the veterinary services were able to upgrade their precautions smoothly to those required in the new circumstances.

The practitioner, the official veterinarian on the spot and the laboratory services reacted with speed and efficiency to the initial emergency and the diagnosis was carried out with the utmost speed, particularly in view of the distances involved in transporting samples to the diagnostic laboratory.

The decision to carry out total slaughter and destruction in the focal zone was an important factor in ensuring that the outbreak was brought swiftly under control.

#### *4.1.5. Swill-feeding*

Effective control over the feeding of unprocessed swill to pigs did not appear to be in place. In the particular social environment which surrounds the use of swill, it was clear that, unless measures were taken, the risk of the introduction of disease through this procedure would remain unacceptably high.

#### *4.1.6. Response by CA to the Report*

In their comments, received 30 March 2001, the Uruguayan authorities responded to all the recommendations of the draft report.

Regarding swill feeding they stated that a draft decree was being drawn up, for consideration by the Government and promulgation, on keeping animals on rubbish dumps and feeding them on waste with the aim of improving safeguards. The authorities attached a copy of the draft decree to the comments.

Regarding animal identification the authorities stated that the Government was looking into the progressive implementation of an individual identification system based on the use of ear-tags to be devised in the course of 2001. The CA maintained, however, that they were able to fulfil the Community requirements on animal identification for live animal exports (cattle and sheep) to the EU.

Regarding co-ordination between Public Health and Animal Health veterinarians, the authorities stated that contacts had been stepped up between the Animal Health and Animal Industry Divisions, and that the latter was arranging co-ordination meetings for all its officials to make the veterinarians working in public health aware of the major animal health issues.

## **4.2. Background to present mission**

### *4.2.1. Evolution of the disease*

No outbreaks of FMD occurred in Uruguay between 1990 and 2000, vaccination ceased in 1994 and the country was declared officially free from FMD at the end of 1995.

An outbreak occurred in the Department of Artigas (border with Brazil) in October 2000, caused by FMD Virus type O and was effectively stamped out.

Uruguay regained the O.I.E. status of “free of FMD without vaccination” on 25 January 2001.

On 23 April 2001 an FMD suspicion was reported and the presence of disease was confirmed on 24 April 2001. The initial outbreak occurred in the south eastern part of Uruguay near the border with Argentina and was caused by FMD virus type A<sub>24</sub>.

By 20 June 2001, 1596 outbreaks had been recorded. It spread to most of the departments of Uruguay, with Soriano and Colonia being the most affected.

Information on the evolution of the disease, maps and data can be found on the PANAFTOSA Web site: [www.panaftosa.org.br](http://www.panaftosa.org.br) and on the MGAP web site: [www.mgap.gub.uy](http://www.mgap.gub.uy)

### *4.2.2. Imposition of EC restrictions*

Restrictions on imports into the EU were imposed by Commission Decision 2001/388/EC, amended by 2001/410/EC, which allow Member States to authorise imports of:

- (a) any fresh meat from FMD susceptible animal from Uruguay produced on or before 23 March 2001 and certified in accordance with the conditions laid down in Decision 93/402/EEC
- (b) boned fresh meat and offal from FMD susceptible animals canalised for treatment, produced after 23 March 2001 up to 23 April 2001 and certified in accordance with the conditions laid down in Decision 93/402/EEC.

Imports into the Community of bone-in fresh meat and offal for human consumption other than that referred to in paragraph 1(b), produced after 23 March 2001 were prohibited.

## 5. MAIN FINDINGS

### 5.1. Competent authority controls (FMD)

#### 5.1.1. Competent Authority Performance

The CA has a clear structure and a direct chain of command. The mission team observed that once a policy is established it is implemented promptly by the field staff. The response to the outbreaks of FMD has been led by the DGSG, within the MGAP.

The CCA defines the measures to be implemented at national level and although the administration of the “Departamento” has some degree of autonomy, the measure taken cannot differ significantly from the national ones.

It was noted that, due to the emergency, there were few written instructions from the CCA to the lower levels. Instructions and information were mainly provided by press communiqué, radio and telephone. The CCA informed the team that the legal basis for the future vaccination programme will be established in a Ministerial decree to be drafted in July.

#### 5.1.2. National contingency plans and operation are instructions

There is a contingency plan for eradication of exotic diseases which mainly foresees stamping out, last revised in 1999, and there is a guide of operational instructions, last revised in 1996. Both documents were available at central and local level, and staff were familiar with the contents. The stamping out was implemented adequately (including establishment of local disease control centres, methods and timing of slaughter, burial etc).

The contingency plan foresees that in case of an outbreak of an exotic disease, the SINEASA “Sistema Nacional de Emergencia Sanidad” is activated with the participation of the MGAP, the Ministry for the Interior, the Ministry of Transport and Publications, the Ministry of Defence and the Ministry of Economy and Finance.

The leading/steering Ministry is the MGAP. Roles and responsibilities of other Ministries are also clearly defined in the contingency plan.

The Ministry for the Interior (Police) gives support to MGAP staff, puts movement restrictions in place, roadblocks etc.

The Ministry of Transport and Public Works is in charge of burying animals during stamping out.

The Ministry of National Defence (Army) is in charge of killing of animals, support in air transport of MGAP staff and support in border controls.

The Ministry of Economy and Finance implements restrictions and controls at borders/customs.

“The Manual of Operation Procedures” within the contingency plan describes in detail the tasks of officers involved in stamping out procedures.

### 5.1.3. Control strategy

From 23 to 29 April 2001, the control measures were based on stamping out the disease. From 29 April, these were changed to a vaccination-based approach.

## 5.2. Action taken to control outbreaks

### 5.2.1. Measures in place before the first outbreak due to disease in a neighbouring country – in place since 9 August 2000

Following reports of FMD outbreaks in Argentina, Uruguayan veterinary services were already in a state of pre-alert and the following measures had been taken:

- Activation in each department of the “Comission Departamental de Emergencia Sanitaria” (SINEASA) on 14 March 2001.
- Awareness campaign information to farmers, radio, leaflets, personal visits by veterinarians to farms, meetings at dairy co-operatives.
- In selected municipalities at the borders with Argentina, all animal movements were subject to a prior inspection and authorisation by the veterinary services.
- Active serological surveillance in bovines in the municipalities bordering Argentina from 13 March 2001:
  - 20% of each lot of male calves for slaughter were sampled.
  - by 18 April 2001, 1015 samples from 192 lots had been tested, all with negative results.
- Increased controls at BIPs and creation of mobile posts and increased controls at place of entry of persons and vehicles.
- Throughout the country “at risk farms”, i.e. farms owned by foreigners with private or commercial links with Argentina and Brazil, were also put under surveillance. All movements of animals from these farms were required to be authorised by an official veterinarian (approx. 600 farms)

### 5.2.2. Action taken to control outbreaks before 29 April 2001

Each time an outbreak was identified, a file was opened and a standard form “formulario de foco inicial” was completed. Information collected included data about the owner of the farm, the census, the samples collected for the laboratory and animal movements in/out the farm in the previous 30 days. For the first outbreaks, a map of the farm and neighbouring farms was also drawn.

The first outbreak was reported on 24 April in the Department of Soriano, near the border with Argentina, in an intensive dairy area. The outbreak was confirmed clinically after 18 hours by an official veterinarian.

In the following days more infected farms were identified. From the lesions found it was concluded that the disease had entered the country 8 days earlier.

It was noted that:

- The local veterinary units visited had responded to reports of FMD within 8 hours of notification, and had followed the guidance set out in the contingency plan.
- A local disease control centre was set up at the headquarters of the local military unit (Brigado do Infanteria San Martino Nr 2 de Colonia), and stamping out operations were directed from there.
- The inspection team was given full descriptions of the procedures and found them to be adequate (including slaughter, burial of carcasses, movement restriction, roads blocks etc). All documents relating to the outbreak were well filed, readily accessible and field staff had done their best to complete them thoroughly.
- Collaboration between the army, the police, the veterinary services and the civil administration was excellent.
- Epithelium and blood samples were sent to DILAVE which confirmed the clinical diagnosis by serology, identifying antibodies against FMD type A virus by VIAA and enzyme-linked immunosorbent assay.
- Live animal markets and the sale of farm-produced cheese were suspended.
- A stand-still of animals in the whole country was imposed from 27 to 29 April<sup>6</sup>.
- 22 road blocks were set up, manned by the army and police.

### 5.2.3. *Measures taken to control outbreaks after 29 April 2001*

On Sunday 29 April, a meeting was held at the central veterinary services with the participation of the President of the Republic and Minister of Agriculture.

The decision was taken to change the control policy from stamping out to mass vaccination, with priority on the more vulnerable areas (i.e. areas with milk production or large numbers of small holders). Immediate publicity was given through radio and television.

---

<sup>6</sup> *In their response to the draft report the CA noted that EU export certification was withdrawn on 24 April 2001. Only exports of products manufactured before 24 April 2001 are authorised, subject to the agreement of the importing country or where treatment ensures the inactivation of FMD virus.*

At the time, there were 479 outbreaks declared by Argentina and 56 outbreaks in 8 departments in Uruguay. On 28 April, the total of number of animals destroyed was 3,479, and 11,752 bovines, 2,874 sheep and 22 pigs were awaiting destruction.

After 29 April, the veterinary services put all their resources into the distribution of the vaccine to livestock owners (see next paragraph) and no more animals were killed.

Since this date, “outbreak farms” have been put under restrictions, prohibiting the movement of animals from the farm, but permitting movement of people and farm machinery.

Clinically affected and in-contact animals (including pigs, sheep and goats) are neither slaughtered nor vaccinated until the last sick animal has recovered, when they are vaccinated<sup>7</sup>. Sick and in contact animals are not identified as long as they do not leave the farm<sup>8</sup>.

However, at least in one case, in a holding with dairy cows and pigs in the centre of a dairy area, the owner decided to slaughter the pigs even though he was aware that no compensation from the MGAP would be payable.

The following cases were noted:

- On a farm with 99 bovines and 3 pigs. At the first visit one bovine was sick. At the second visit (approximately 20 days after the first), 3 pigs, and 88 bovines were found sick and 10 were dead.
- On a farm with 451 bovines. At the first visit, 2 were sick, at the second visit 160 were sick.
- On a farm with 26 bovines and one pig. Two bovines were sick, all bovines were sampled and 9 were found positive (2 VIAA and 7 ELISA)

Hunting was suspended from 2 to 24 May nationwide. However some departments had already banned hunting earlier.

Road blocks were kept for disinfection purposes. In addition, livestock owners themselves organised more road/disinfection points. The veterinary services acknowledged that this might have contributed to the spread of the disease, and that movement of agricultural machinery might also have contributed. The local veterinary services had drawn a map showing the distribution of outbreak farms along agricultural roads and routes used for the collection of milk.

---

<sup>7</sup> *In their response to the draft report the CA stated that this is a recommendation of the PANAFTOSA guidelines.*

<sup>8</sup> The Competent Authority in a letter dated 9 July 2001 (Nota/Fax DGSG: N° 102/001) stated that “individual animal identification of all susceptible species involved in outbreaks is on-going before the ban on movements is lifted and before exports start to overseas FMD free markets, in order to assure the chain of certification”.

Milk from infected cows was fed to backyard pigs resulting in clinical disease.

#### 5.2.4. *Extinction of outbreaks and serological control*

After the first visit there is usually one or more additional visits from the veterinary services a standard form “formulario de seguimiento de foco” is used for the last visit when the outbreak is considered to be extinguished. Data on animals which develop the disease after the first visit, the vaccination carried out, and the hypothesis as to the origin of the outbreak, are reported in this form.

It was noted that:

- Visits between first and last inspections are not recorded.
- 30 days after the last sick animal is found in an outbreak it is declared to have been eradicated.

The CA intends to perform a serological survey on 400 eradicated outbreaks in the most affected areas. The objective of the sampling is to determine the presence of FMD infection in bovines and ovines in these outbreaks. The total number of animals to be blood sampled in bovine herds and ovine flocks is defined to detect the disease with 95% confidence, on the assumption that the prevalence is 8% in bovines and 4% in ovines. Sick and in-contact bovines and sheep will be marked with a microchip and, in the case of sheep, with an implant in the ear.

The animals in the most affected departments: Soriano, Colonia and Rio Negro will be marked first, with priority given to holdings with both breeding bovines and sheep. Animals are to be individually identified when blood sampled.

### 5.3. **Identification of animals**

Animal identification and the system of movement control through DICOSE, as well as some of the limitations of the brand identification system, has already been described in the previous report (DG(SANCO)/1016/2000 MR Final).

The livestock owners' registration system is being merged and integrated with an extensive G.I.S. information system.

The mission team was given a demonstration of the prototype system, which will allow the identification of all registered livestock owners within any specified area (e.g. within 25 km of an outbreak). At the time of the inspection the system was not operational at field level.

Under the current system, animals are registered by the owner. The census is updated as soon as the data from the livestock movement permit has been entered. Animals belonging to two different owners, grazing on the same land, are registered separately.

One case was found of a farm with one mixed group of animals belonging to two different owners. Only the animals belonging to one owner were vaccinated. Animals from the second owner developed FMD. The whole farm was declared an outbreak and put under restrictions.

#### **5.4. Movement Controls**

All animals being moved or transported must be accompanied by a waybill containing:

- a) Name and registration number of seller
- b) Location from which the animals are being moved
- c) Name and registration number of buyer
- d) Premises to which animals are being delivered
- e) Number of animals by category and their hot brands, or, in case of sheep, their earmarks
- f) Purpose of movement
- g) Itinerary to be followed.

Blank waybills may be bought, no more than ten at a time, at municipal offices. At purchase, the document is marked so as to ensure that it is only used by the purchaser.

The waybill is issued as an original and three copies. After completion by the sender, the original and first copy are given to the transporter. His first call is to a police station where the documents are stamped. At destination, he delivers them to the consignee who, in turn, takes them for stamping to the nearest police station. The top copy is retained on file and the first copy is returned to the consignee. The police return the original to DICOSE via the Provincial Animal Health Office.

The consignor must bring the second and third copies to a police station where they are stamped and the third copy returned to the consignor. The second copy is sent by the police to DICOSE, also via the Provincial Animal Health Office.

Thus the consignor and consignee have, in principle, copies for their records and both DICOSE and the Animal Health Division have evidence that specified animals have been consigned and delivered.

The waybill has a validity of six days, and the application of the police seal must take place within 24 hours of the commencement or completion of a transport movement.

Occasional checks are carried out by the police to ensure that hauliers are in possession of the correction documentation and that the declared route is being followed.

The procedure allows copies of waybills of animal lots entering a farm to be delivered to the Provincial Animal Health Office within 5 working days. It may then take up to a month for details of any given waybill to be incorporated into the DICOSE database.

Until 1996, the waybill included specific reference to the animal health guarantees contained in the meat export certificate defined in the Annex to Commission Decision 93/402/EEC, but these were removed as part of a general revision of procedures when the country was declared free of FMD in 1996.

In cases where cattle traders are involved, e.g. trading of animals on a commission basis, the original waybill is replaced by a waybill issued in the slaughterhouse, which may summarise cattle lots from various origins and accompanied by various waybills.

The original waybills remain with the trader to be validated at the next police station and copied to DICOSE, whereas the slaughterhouse retains an invalidated copy of the summary permit issued in the slaughterhouse<sup>9</sup>.

Other deficiencies observed related to the movement permit system were as follows:

- Animal lots were identified as having changed ownership (“con cambio de propiedad”), although a change of ownership had not as yet occurred, e.g. at direct transport from farm to slaughterhouse or at transport through cattle traders. (This kind of trade is explicitly identified as not representing a change of ownership on the movement permit.)
- Wrong or missing identification marks (on animals or on movement permits) were not followed-up and no check was made to ensure correlation and correspondence of brands (between movement permit and animals) at the slaughterhouse visited.

One lot checked visually appeared to have a number of different hot brands compared to those indicated on the movement permit.

It became obvious after checking of three different animals from three different lots that the hot brand did not correspond to the brands recorded on the movement permit in any of the three cases.

- None of the movement permits made reference to:
  - the code or latest version of EC Decisions
  - vaccination

---

<sup>9</sup> *Since the mission, the Slaughter Plants Department has issued a circular (1/2001, date 3 July 2001) informing the head of the establishments veterinary inspection service that “it is mandatory that the property and transit documents issued by cattle retailers and which accompany the herds arriving at the plant, must be backed with a photocopy of the original document, bearing the certification of the Division of Animal Health”.*

- FMD freedom of holding and surrounding area
- the 40-day presence of animals on the farm of dispatch (This 40-day guarantee could, at present, only be given on the basis of a physical visit to a farm, since farmers are obliged in Uruguay to keep copies of movement permits on file.)
- the cleaning and disinfection of vehicles before loading.

It must, however, be emphasised that these controls and guarantees had relaxed due to Uruguay's status of "FMD-free without vaccination".

#### *5.4.1. Legislation and enforcement of controls on illegal movement*

Generally, the system in place is not fully enforced. During on-the-spot checks at a slaughterhouse there were inconsistencies between the identity declared on the accompanying documents and the animals. Checks on files of outbreak farms at the local veterinary office identified illegal movements (prior to outbreaks) that had not resulted in prosecution. Progressively more restrictive movement controls were put in place during the evolution of the outbreaks

### **5.5. Vaccination programme**

The emergency vaccination campaign had not been prepared in as much detail as the stamping out strategy and delays were incurred in obtaining vaccine. The vaccination programme covers only cattle and pigs. Sheep and goats are excluded from vaccination both on a routine and emergency basis<sup>10</sup>.

No written instructions or forms to be used to record progress of the vaccination campaign were available for inspection by the mission team. These were, however, printed, and were made available during the mission.

#### *5.5.1. Description of the vaccination programme*

##### First vaccination:

- 1) ring vaccination (started 01/05/01) around the outbreaks and vaccination of a buffer zone in the centre of the country, running from north to south along the main road. Calves under 3 months of age are not vaccinated.
- 2) mass vaccination with the following priorities started on 05/05/01.

---

<sup>10</sup> *In their response to the draft report, the CA made the following comment: "The effort of the massive vaccination, as an effective control measure, should concentrate in the cattle population, following the reference guidelines provided by PANAFTOSA, supported by experience and research developed in South America during the last twenty years.- Sheep have always played a secondary role in the epidemiology of FMD in Uruguay and South America. According to the field evidence and performance of the types and strains present, there is no justification to practice massive vaccination in this species. At present, a serological survey on this species is being carried out- Pigs are very important, due the well-known role of the species in viral multiplication, but, since response to vaccination is poor, massive vaccination should be disregarded.*

- a) dairy areas and high genetic value herd started 05/05/01
- b) vaccinations at the border with Brazil, which were then extended westward to include the rest of the national herd (started 05/05/01).

Mass vaccination in the area between the buffer zone and the border with Argentina started 10/05/01. **By 28/05/01, 95% coverage had been achieved, providing an expected 60-70% effective protection.**

#### Second vaccination

The booster vaccination of dairy cattle, **which began on 15 June**, was completed on 22 **July**. For the rest of the national herd it was due to start on 5 July (policy being to re-vaccinate between 30 and 60 days after the first one – in line with guidance provided by PANAFTOSA). The first vaccination gives, according to PANAFTOSA, a protection of 70%, and after the booster the protection is 100%.

Usually, the vaccination is performed by the livestock owner, except in peri-urban small holdings, where it is done by the veterinary services.

#### 5.5.2. Vaccine use & distribution

Vaccine was purchased from several sources, as per the table below.

Data on the vaccine used by 22/06/01

Origin	Doses purchased/received	Virus strain
Brazil	7 000 000	A <sub>24</sub> O C
Argentina	500 000	A <sub>24</sub> O
Paraguay	2 000 000	A <sub>24</sub> O
Colombia	2 000 000	A <sub>24</sub> O

All vaccines have an oil adjuvant, and in future all will be bivalent. Data on infectivity, sterility and potency for each batch of vaccine, as provided by the supplier and certified by the veterinary services of the exporting country, were provided to the inspection team and were found satisfactory.

Military planes were used to fetch the vaccine, which was distributed to the Departmental Veterinary Services and from there to the local veterinary offices or the police stations.

Farmers were summoned to collect the vaccine by radio, and the quantity given reflected was given according to the annual census declaration.

Vaccination is free of charge for 2001. In 2002, livestock owners will have to pay for it.

## 5.6. Uruguayan import controls

### 5.6.1. General controls over the import of live animals and animal products

Each import needs a “licence”. For each import, the importer has to apply separately. A “Risk Evaluation Committee” defines which guarantees are requested for the specific product. The responsibility of the official is mainly to control that the guarantees provided in the health certificate accompanying the product match the requirements.

Some certificates were found where the guarantees were not consistent for the same type of products.

The CA stated at the final meeting that this was due to the uncertainty in relation to the real health status of the exporting country.

### 5.6.2. Border controls

All three border ports visited (1 airport, 1 harbour, 1 road) checked the cleanliness of vehicles and persons, and were particularly vigilant to avoid the introduction of illegal products.

Disinfection mats, wheel disinfection basins, sprays, etc. were available and their use was compulsory.

Controls carried out at these border posts do not constitute import controls, which are carried out at designated places of destination.

The import of susceptible livestock from countries affected with FMD is prohibited.

#### Airport Controls

The luggage of passengers is scanned with special X-ray equipment imported from the USA for the purpose of detecting food which is, if present, confiscated, denatured, and disposed of under official control. Passengers have to pass over disinfection mats when entering the airport building after leaving the plane.

Catering waste from aeroplanes has to be collected in containers by the catering firm under contract. The catering firm is in charge of the elimination of the kitchen waste, which is collected and destroyed in municipal premises under official control.

During 2000-2001, 40 sheep, 15 horses and some camels were imported through the airport.

#### Harbour Controls

The harbour visited is basically an entry point for passengers, with or without cars, and not for goods. The ports were adequately staffed.

Particular attention is paid to the disinfection of shoes and car wheels, as well as to the illegal import of food.

Clear instructions are in place, determining that the introduction of any food of animal origin and specified food of plant origin for personal use is strictly prohibited. This rule appears to be applied as strictly as possible. Food to be condemned is denatured and incinerated on the spot.

### Road Border Controls

Controls for vehicles and passengers are similar to those at harbours (disinfection of shoes and car wheels). A disinfection port for entire cars is under construction.

The introduction of products of animal origin, such as dairy products, treated hides, etc., are only allowed if specific licences are granted by the Ministry of Agriculture. The licence lays down the sanitary conditions with which the products have to comply at import.

The sanitary conditions laid down, however, are not always clear and/or consistent for the same kind of product, and import health certificates do not always give the same guarantees as required in the licence, such as:

- For the import of Roquefort cheese, the licence requires that the milk used for the production of the product derives from a country or a region free from FMD, but the same permit requires also that the product has undergone a heat-treatment and/or shows a pH which guarantees the inactivation of the FMD virus.

The health certificate accompanying the consignment, however, stated that “The milk has undergone a heat treatment recognised to guarantee the non-viability of pathogenic agents caused by transmissible diseases of the OIE lists A and B through milk...”. The certificate did not certify that the milk was produced in a country free from FMD.

- For the import of milk powder, the licence require that the milk used for the production of the product derives from animals free from infectious diseases, from establishments in which no animals sick from FMD have been detected and that the animals have been vaccinated against FMD. Some licences further require that the product has been processed and undergone a heat treatment which inactivates the FMD virus: for raw milk 70° to 75°C for 20 seconds and 120°C for 30 seconds or an equivalent time/temperature combination. Regarding heat treatment, other licences for the same kind of product requires double pasteurization which inactivates the FMD virus, such as “74°C for 25 seconds and 112°C for 6 seconds or an equivalent time/temperature combination”.

The accompanying import health certificate for cheese, only guarantees compliance with OIE standards which do not appear to deliver the same guarantees as required by the licences (see the OIE International Animal Health Code, appendix 3.6.2.5).

## 5.7. Laboratories

A description of the laboratory system of Uruguay can be found in the previous FVO reports. The Central Laboratory stated that main budgetary problems identified in mission report DG(SANCO)/1016/2000 had been solved and that there is now an adequate laboratory service.

A building was being adapted to handle FMD field samples as the previous structures had been dismantled when the country stopped vaccination in 1994. Some deficiencies were found at field level in the collection of samples:

- There were no written instructions from the laboratory on the collection of field samples. At the final meeting, the CCA stated that such an instruction exists, but fell into abeyance in recent years.
- There is no standard form to accompany the sample to the laboratory. (The outbreak form (formulario de foco initial) is usually used.
- Animals are not marked when samples are taken. Epithelium samples and also a few blood samples from different animals are pooled together. Blood samples are taken mainly from sick animals and are very often negative. They are carefully packed and sent by bus courier to the central laboratory.

The Central Laboratory sent samples to PANAFTOSA, to Plum Island and to the World Reference Laboratory Pirbright. The virus was typed as almost identical to the field strain collected in Argentina. According to results of previous research carried out by PANAFTOSA the vaccine strain used gives a protection of 60-73% against the current field strain (A<sub>24</sub>/Arg/2000 and A<sub>24</sub>/Arg/2001).

The Central laboratory communicates the results of the tests (the laboratory has a capacity of 500 samples/day) to the CVO, who is in charge of communicating the results to the local veterinary services and from them to the owner.

Summary of the data provided by Laboratory (199 batches of samples received: from 24/04/01 to 26/06/01):

- a) 86 batches contained epithelium samples: 20 samples were sent to PANAFTOSA, 18 were positive by ELISA, one negative and one not recorded. 13 were positive for FMD virus type A with Complement Fixation and 7 negative. The other 66 epithelium samples were destroyed as the virus type had been identified and to reduce the risk that virus would escape from the laboratory.
- b) 191 batches contained blood samples, for a total of 685 blood samples of which 9 ovine serum from the very first outbreak and six batches of 10 ovine serum were collected on 26/06/01. All the other samples were from bovines or not specified.

Batches	ELISA	VIAA
191	<p>Batches tested with ELISA: 47</p> <p>Batches in which at least one sample is positive with ELISA PANAFTOSA 17 (36%)</p> <p>Batches negatives:30 (64%)</p>	<p>Batched tested: 191</p> <p>Batches with at least one positive:35 (18%)</p> <p>Batches negatives 156 (82%)</p>

## 5.8. Controls at slaughter

### 5.8.1. Livestock Vehicle Wash

Livestock vehicles are cleaned and disinfected after unloading of animals at the slaughterhouse. The disinfection equipment available at the slaughterhouse visited, although using a correct disinfectant (iodine-based) in the correct concentration, was completely unsuitable for effective livestock vehicle disinfection (10 Litre bottle with very low pressure delivery).

In addition, there does not appear to be any legally binding instruction regarding which disinfectants must be used, and how they are to be used, in the case of FMD<sup>11</sup>. Thus, a truck disinfected with a disinfectant unsuitable for FMD, could nonetheless be issued with a certificate. The certificate, issued after unloading of animals and after cleaning and disinfection of the vehicle, makes reference (wrongly) to the last animal lot (movement permit number) unloaded.

### 5.8.2. Ante-mortem Inspection

Animals arrive at least 24 hours before slaughter. A first inspection is carried out by the veterinary service when animals pass the weighing scale, and pen cards are attributed at this point (transit from reception to holding pens).

The following indications are made on the pen cards which accompany the animals to the slaughter floor: animal lot number, pen number, name of cattle owner, name of trader, number, sex and type of animals, date of arrival, and inspection time. The pen cards are issued and signed by a plant employee and, on the back of the card, the date, time and observations of the ante-mortem inspection are recorded and signed by the veterinarian.

Examination of feet, mouth and lips are not included in the ante-mortem checks, but done at post-mortem inspection. No unequivocal instructions

---

<sup>11</sup> In response to this finding presented at the closing meeting, the CA issued a circular (4/2001 dated 4 July 2001) approving specific disinfectants.

were seen as to how to proceed in the event that FMD is detected during ante-mortem inspection<sup>12</sup>.

#### 5.8.3. *Lot Attribution*

After arrival at the slaughter plant a lot number is attributed by truckload, i.e. by movement permit number, but not by sex, age or type of animals. Lot numbers are serially numbered, and are indicated on the slaughter programme as the DICOSE number to which they relate, the sex and type of animals, and the name of the producer.

#### 5.8.4. *Post-mortem Inspection*

In addition to the standard post-mortem inspection, muzzle, lips and feet are separated and examined, after rinsing, for the presence of FMD lesions. The extra examinations are carried out at a specific post prior to final dehiding.

In the establishment visited, only the interdigital space was inspected and not the peri-ungulate surface from all sides.

No unequivocal instructions were shown as to how to proceed in the event that FMD lesions were detected during the examination (see footnote 12). The veterinarian in charge of post mortem stated that, in case of “fresh lesions”, slaughter was stopped, the lot separated, the Ministry informed and the rest of the lot slaughtered. In the case of healed lesions, no particular measures were undertaken.

#### 5.8.5. *Maturation of meat*<sup>13</sup>

Maturation is controlled by the veterinary service. It is only carried out for the markets which require maturation and not for local consumption.

A label is attached at the door of maturation chillers. On the label the room number is recorded, as are the date, time/temperature of the empty room, time/temperature of the filled room, and time/temperature after 24 hours.

Sensors of thermographs are not always located at the coldest point of the chiller.

Apart from permanent recording thermometers, there are direct reading thermometers in each room.

The time/temperatures are not recorded when the first carcass enters the chilling room and thermograph data indicated that room temperatures could be as low as -1° to 2°C prior to use.

---

<sup>12</sup> In response to this finding presented at the closing meeting, the CA provided guidance to the Department of Slaughter Plants as to the action to be taken when in the course of ante-mortem inspection, there is evidence or suspicion of the presence of animals suffering from FMD (Manual of procedures 2001/1 – Foot and Mouth Disease in Slaughter Plants).

<sup>13</sup> The manual of procedures cited in footnote 12 also gives further guidance on the maturation process (temperature, time and pH controls).

In the slaughterhouse visited, a chilling room temperature of 2°C during maturation, did not lead to action by the official services. All offal is matured (diaphragms 24 hours, others for 3 hours) but trays and racks are not identified. Thus offal can only be traced back to a specific slaughter date but not to a lot of animals.

#### pH Measurement

The pH is measured only if the market of destination requires it and not for local consumption. It is carried out after completion of maturation during quartering and not at the unsplit carcass, by a plant employee under the supervision of the official veterinarian.

Calibration is carried out once per day only and there was no supplier's certificate of the pH meter in place with the recommendations for adequate calibration timing. The CA stated that carcasses with a pH higher than 5.9 are marked "rech" indicating they are unsuitable (rechazado or "refused") for the European Union. Those with a pH lower than 6 are stamped with "UE" (Union Europea) and separated accordingly.

#### Traceability

Carton boxes containing cuts of fresh meat are provided with serially numbered security labels, issued and controlled by the veterinary service. The boxes are identified with the slaughter date, production date (packing date), the duration date, and the type of cut. The commercial labels inside the box contain the date of slaughter, date of production, the lot number, and a code for frozen or chilled.

Carcasses at maturation are tagged and the tag contains the establishment number, the lot number, slaughter date, current slaughter number, chill room number, teeth number, sex and weight.

### **5.9. Certification**

The waybill does not make reference to point 1, indents 1 to 4 (see chapter 5.4, Movement Controls) in animal health certificate - Model A (Commission Decision 93/402/EEC).

In particular it was noted for transfer certification that:

- Meat leaving a slaughterhouse/cutting plant, whether already in a container or not, is accompanied by a health approval for export "Pase Sanitario de Exportacion", specifying the approval number of the establishment where the meat was produced, type of meat, and amount of packages. It further certifies as to whether the meat fulfils the import conditions required by the country of destination. The document is signed by an official veterinarian.
- This document, in addition, is supplemented by the loading document "Documento Unico de Embarque", which, more specifically, makes reference to maturation, pH-requirements and to Commission Decision 2000/418/EC. Minor typing errors on

such documents were corrected without being attested by the certifying officer. These documents constitute the basis for final export certification in the harbour of Montevideo.

## **6. CONCLUSIONS**

### **6.1. Competent authority controls**

The CA is well organised due largely to the clear structure and direct chain of command. Once a policy is established it is conscientiously implemented at all levels.

### **6.2. Action taken to control outbreaks**

The initial stamping out was carried out efficiently. Stamping out and the measures implemented in the field after 29 April 2001 did not, however, prevent the spread of foot-and-mouth disease.

### **6.3. Identification of animals**

Animal identification, based on farm-specific brands, cannot claim with certainty to ensure that all animals covered by a movement permit originate from a defined area, herd or flock.

### **6.4. Movement controls**

The animal movement control system has the capacity to operate effectively, but was not properly enforced, casting doubt upon reliability.

### **6.5. Vaccination Programme**

The abrupt change of policy, from stamping out to massive vaccination (not foreseen in the contingency plan) has caused delays in implementing the vaccination campaign (the full vaccination programme had not been completed on 29/06/2001).

As a consequence of the non-vaccination of sheep, and the vaccination of recovered and in-contact cattle, a comprehensive serological survey would be necessary to ascertain a) the efficacy of the vaccination programme and b) the distribution or spread of the virus. The serological survey would have to take account of the widespread distribution of the outbreaks and the weaknesses identified in animal identification and movement controls.

### **6.6. Uruguayan import controls**

Border controls in Uruguay are effective and appear to be enforced rigorously. However, their effectiveness in respect of animal products, is weakened unnecessarily by the inconsistencies that exist between the import licences and their corresponding health certificates.

### **6.7. Laboratories**

The laboratory services have the capability to provide the essential support to the central disease control and eradication campaign, though this will be enhanced with

the completion of a new dedicated facility for receiving and analysing potentially infected samples.

## **6.8. Controls at slaughter**

The system of certification for cleaning and disinfection is of little value, in particular because no controls are carried out as to whether the vehicle has been cleaned and disinfected before loading<sup>14</sup>.

At present the requirements of Commission Decision 93/402/EEC on the origin of animals and the pH of meat after maturation of carcasses are not fulfilled.

The traceability system in the slaughterhouse visited would allow the tracing of fresh meat (though not offal) if the information provided by the movement permits was reliable.

## **6.9. Certification**

Due to an extended period of FMD freedom, the authorities and the industry have relaxed their FMD-related controls. Animal health certificates are issued containing data that cannot be ascertained by existing pre-certification (the Waybill), (as foreseen in Council Directive 96/93/EC) and in conjunction with the deficiencies noted at the slaughterhouse visited, almost none of the points of Commission Decision 93/402/EEC, Annex II, Part 2, Model A, could be certified at present.

## **7. CLOSING MEETING**

A closing meeting was held on 29 June 2001 with the MGAP. At this meeting the main findings and conclusions of the mission were presented by the inspection team. The representatives of the MGAP clarified a number of issues and in response to the deficiencies identified, a delegation travelled to Brussels to present written guarantees in advance of the Standing Veterinary Committee meeting held on 10 July 2001.

These guarantees included:

- a) Improved control over the movement of animals to slaughter, including on farm inspection and a revised certification procedure addressing the deficiencies noted in chapter 5.9 (Service Order OSG N° 03050701 dated 5 July 2001).
- b) Revised conditions for the transportation of live animals and the disinfection of vehicles (Service Order N° 04050701 dated 5 July 2001).
- c) The mandatory re-vaccination of calves, regardless of their age (Service Order OSG N° 06050701 dated 5 July 2001).

---

<sup>14</sup> In response to this finding presented at the closing meeting, the CA issued Service Order OSG N° 04050701 dated 5 July 2001, laying down the conditions for cleaning and disinfection of the vehicles for transportation of live animals (bovine, ovine, swine, equine). The requirements of this order will be enforced during on farm livestock inspections which are now to take place prior to dispatch of animals destined for slaughter for the EU (Service Order OSG N° 03050701, dated 5 July 2001).

- d) The banning of cattle movement if non-vaccinated and until 15 days after vaccination (Service Order N° 05050701 dated 5 July 2001).
- e) Corrective action at slaughterhouses which includes a) a requirement that animals submitted by cattle dealers must be accompanied by a copy of the original waybill (Slaughter Plants Department, circular 1/2001 dated 3 July 2001), b) revised procedures in the event that FMD is suspected/confirmed in animals at ante or post mortem and instructions for the enforcement of the maturation process (Slaughter Plant Department – Manual 2001/2), c) a resolution (dated 3 July 2001) stipulating measures to control disinfection of transport vehicles complemented by Circular DIA 4/2001 dated 4 July describing the approved products and concentrations required.

## **8. OVERVIEW**

Although the CA reacted promptly to the initial outbreaks, their actions (particularly the implementation of the nation-wide massive vaccination programme) have yet to bring the clinical manifestations of FMD under control. The non vaccination of sheep and the vaccination of in-contact and recovered cattle, will make it difficult to ascertain the extent of viral presence/circulation unless extensive sero-surveillance is performed.

Animal health certificates are issued containing data which cannot be ascertained by pre-certification and are therefore not in compliance with the requirements of Commission Decision 93/402/EEC. Furthermore, the pre-certification that is submitted to establishment based inspection staff, is often incomplete or erroneous.

## **9. RECOMMENDATIONS**

### **9.1. To the competent authorities of Uruguay**

- 9.1.1. Submit a report to the European Commission confirming a) the completion of the FMD vaccination programme with details of the vaccine coverage/efficacy and b) describing the disease status of susceptible species in Uruguay.
- 9.1.2. Review the system of certification to bring it in line with rules and principles which are at least equivalent to the provisions of Council Directive 96/93/EC and in particular Article 3(2).
- 9.1.3. Review the system of movement controls to ensure that the guarantees required in Commission Decision 93/402/EEC on the controls over animal movements can be properly verified.
- 9.1.4. Review the system of slaughterhouse controls to ensure full traceability and the proper maturation of meat destined for the EU market.
- 9.1.5. Review the national contingency plan so that the various FMD control and eradication strategies are described with detailed operational instructions for field staff which take into account local

circumstances (animal production systems, geography and border considerations)<sup>15</sup>.

The Uruguayan authorities should, within 2 months of receiving the final report, forward to the Commission Services an action plan with timetable addressing the conclusions and recommendations made in the report<sup>16 17</sup>.

## **9.2. To the Commission Services**

9.2.1. Review the restrictions applicable to Uruguay in respect of the export of fresh meat, de-boned fresh meat and offal once the information requested in paragraph 9.1.1 above has been received and satisfactory guarantees have been given in response to the problems identified in this report.

---

<sup>15</sup> *In their response to the draft report the CA stated that the National Contingency Plan is being reviewed and adjusted according to the Mission's recommendations. The final version will be forwarded within the dead line established.*

<sup>16</sup> The CA has submitted an initial written response with revised legislation (see Section 7, Closing Meeting) which is being reviewed by the Commission's Services.

<sup>17</sup> *In their response to the draft report the CA presented a detailed description of the measures taken to respond to the report recommendations, as summarised in the addendum to this report.*

## **ADDENDUM TO MISSION REPORT DG(SANCO)/3342/2001**

### **Competent Authority response to the recommendations in the Report**

Since the FVO mission, the CA had kept the Commission services informed of the evolution of FMD through regular reports.

The responses of the CA to the recommendations of this report are given below, as these are of particular importance in assessing the effectiveness of its actions to date.

#### **Recommendation 9.1.1:**

- In their response to the draft report, the Uruguayan authorities provided preliminary information on the vaccine coverage of the cattle population, and stated that a serological survey of the sheep population is in hand.

#### **Recommendations 9.1.2. and 9.1.3:**

- The review of the system of certification and control of animal movement to slaughter plants approved for exportation has been undertaken. On 5 July 2001, the Animal Health Services (Uruguay CCA) issued Service Order N° 03050701, establishing the activities to be carried out by registered veterinarians, local livestock services and personnel from the veterinary inspection services in the slaughter plants.
- DICOSE's waybills document the movement of animals at each farm. These documents will show if the animals are born on the farm, or if they have remained there for the period required in EU certification. The verification of this information supports identification of the animals and proper certification by the registered veterinarian. The waybill documentation should be available and provided by the farmer, at the request of the local Animal Health Veterinary Officer or the registered veterinarian.
- The enforcement of Service Order N° 03050701 will ensure the certification chain, and the identification of animals certified when exports to the EU are resumed.
- Adjustments to the conditions for transportation of animals and in the vehicles used have been made. On 5 July 2001, the General Department of Livestock Services issued Service Order N° 04050701, establishing conditions to be fulfilled by vehicles for animal transportation, and creating a registry of premises for cleaning and disinfection of vehicles. It also details the information to be registered, as well as the penalties in case of non-compliance. Finally, this Order includes specific instructions for the approval of cleaning and disinfection plants, describes the requirements for the approval, for the operation of the plant, the certification to be issued and the controls to be carried out by the Division of Animal Health (DSA).
- With regard to the vaccination of calves, on 5 July 2001, the General Department of Livestock Services issued Service Order N° 06050701, establishing mandatory re-vaccination of all calves, regardless of their age. November 2001 has been

designated to carry out this re-vaccination, and the deadline for this action has been established as 30 November. Furthermore, it establishes mandatory identification with ear-tags of all the calves vaccinated at that time.

- With regard to general certification of the vaccination of all classes and categories, on 5 July, 2001, the General Department of Livestock Services issued Service Order N° 05050701, banning movements of cattle not vaccinated and until 15 days after vaccination. This order also gives details as to the certification of vaccination in the document of ownership and transit.

**With regard to control and inspection at slaughterhouses:**

- The Slaughter Plants Department has issued Circular 1/2001, dated 3 July 2001, advising the Inspectors in Charge of the plants' Veterinary Inspection Services that it is mandatory for the property and transit documents issued by the cattle retailers, and which accompany the herds arriving to the plant, to be supported by a photocopy of the original document, bearing the certification of the Division of Animal Health.
- The Slaughter Plants Department has a written procedure; Procedure 2001/2, for action where FMD affected animals are detected at a slaughter plant. Circular 1/2001 also gives instructions to enforce the proceedings for sanitary maturation of carcasses and offal and to measure, control and record the pH in the carcasses, according to Procedure 2001/2, issued by the Slaughter Plants Department.
- The Division of Animal Industry (DIA) has issued a Resolution on 3 July 2001 stipulating measures to control the system used to disinfect the vehicles for cattle transportation. This resolution was complemented by DIA Circular N° 4/2001, dated 4 July 2001, including the list of chemicals that should be included in the formulation of the disinfectants used as well as the concentrations required.
- The resolutions, service orders, circulars, procedures and instructions referred to above have been submitted to the European Commission, annexed to notes DGSG N° 102, dated 9 July 2001 and DGSG N° 113, dated 31 July 2001.
- The comprehensive resolution issued by the General Department of Livestock Services, DGSG RG N° 36/001, dated 24 July 2001, unifies and updates controls of animal movements and certification. This resolution has been enforced as from the end of the second round of general emergency vaccination (re-vaccination), completed on 23 July 2001.
- In addition, the Uruguayan authorities adopted a Decision, to be implemented shortly, requiring mandatory individual identification of cattle through ear-tags. This identification shall be applied before cattle are moved to export slaughterhouses, and will complement the certification issued by registered veterinarians.

**Recommendation 9.1.4:**

- The information provided in the responses to recommendations 9.1.2 and 9.1.3 aims to provide reliable identification of the animals, which will form the base of the traceability system.
- A system for offal traceability is being implemented through identification of trays and racks based on the reference number of the herd slaughtered.

**Recommendation 9.1.5:**

- The Uruguayan authorities stated that the National Contingency Plan is being reviewed and adjusted to reflect the mission's recommendations. They undertook to forward the final version within the deadline set in this report.