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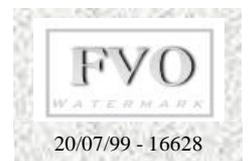
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**FINAL REPORT OF A VETERINARY MISSION TO**

**THE NETHERLANDS**

**ON 25<sup>th</sup> MARCH 1999**

**FOR THE PURPOSE OF ASSESSING ANIMAL HEALTH MEASURES TAKEN  
FOLLOWING A TRANSPORT OF PIGLETS  
FROM THE NETHERLANDS TO SPAIN**



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## 1. MISSION DETAILS

### 1.1. Duration of mission

The mission took place on 25<sup>th</sup> March 1999.

### 1.2. Mission team

Organisation	Number
Food and Veterinary Office	2
Member State	1

Representatives from the National Inspection Service for Livestock and Meat Central Department, RVV (central competent authority) accompanied the inspection team throughout the mission.

### 1.3. Reason for mission

Category	Reason for mission	Tick as appropriate
JEM	Response to emergency health problem, eg. disease outbreak, safeguard action taken by Member State, rapid alert system notification	v

### 1.4. Purpose of mission

Category	Purpose of the mission		Tick as appropriate
DO1	Animal or plant disease outbreak (specify disease)	Initial mission	v
DO2/3/4..	Swine vesicular disease	Follow-up mission	

### 1.5. Scope of mission

To assess the measures taken by the Dutch competent authority (CA) following a transport of piglets from the Netherlands to Spain from which after arrival in Spain the isolation of swine vesicular disease virus was reported by the Spanish authorities and to examine the epidemiological situation.

### 1.6. Sites visited

Category	Sites visited		Number
LCR	Laboratory service	Central/reference	2
FFF	Farms		1

## **2. LEGAL BASIS FOR MISSION**

### **2.1. General**

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

### **2.2. Specific**

- 2.2.1. Council Directive 92/119/EEC introducing general Community measures for the control of certain animal disease and specific measures relating to swine vesicular disease;
- 2.2.2. Commission Decision 98/139/EC laying down certain detailed rules concerning on-the-spot checks carried out in the veterinary field by Commission experts in the Member States.

## **3. BACKGROUND**

### **3.1. Preliminary information**

- 3.1.1. On 9.3.99 1.457 piglets were loaded on a lorry and trailer at a breeding farm in the Netherlands and sent to Spain for fattening. The consignment was stopped on Spanish territory near the border with France during a routine road check carried out on 10.3.99 and around 100 piglets were found dead. Piglets examined showed an increase in body temperature. The Spanish authorities took the decision to offload and kill the animals and informed the Dutch authorities.
- 3.1.2. On 10.3.99 the Dutch authorities put the farm of origin under official observation and movement of pigs off the farm was banned. The pigs were clinically inspected and no symptoms of a list A disease were observed. Blood samples were taken at random from five piglets and five sows and were examined serologically at the 'National Research Institute for Animal Husbandry and Animal Health (ID-DLO) at Lelystad for CSF, FMD and SVD with negative result. In addition, five piglets were tested for CSF by an IFT which also proved to be negative.
- 3.1.3. On 11.3.99 the Minister for Agriculture, Fisheries and Food in Spain adopted a trade ban for pigs coming from the Netherlands.
- 3.1.4. The killing and destruction of the piglets that had arrived in Spain was completed in the early morning of 11.3.99. By that time altogether 320 piglets were said to have died. Six dead piglets and 25 blood samples from live piglets were taken and sent to the 'Laboratory for Health and Agriculture' in Barcelona. On 12.3.99 the laboratory reported that the first serological and virological results with regard to classical swine fever were negative. However, on 15.3.99 it was

reported that three samples produced a cytopathic effect in cell culture and that one serum sample showed a titre of 1:50 in the serum-neutralisation-test (SNT). Samples were sent to the 'National Reference Laboratory for Exotic Diseases' in Valdeolmos on 16.3.99 which reported the isolation of swine vesicular disease virus from three samples on 22.3.99. No detailed or conclusive post mortem findings were so far made available by the Spanish authorities for the six piglets which were taken.

- 3.1.5. In view of the results obtained in Spain the Dutch authorities revisited the farm of origin again on 22.3.99 and took 60 blood samples at random which were serologically tested for SVD with negative result. Two Dutch farms which had received piglets from the farm of origin were visited on 23.3.99. The pigs were clinically inspected and on both holdings 60 blood samples were taken at random and examined for SVD by ELISA and SNT with negative results.

#### 4. MAIN OBSERVATIONS

##### 4.1. National SVD-monitoring in the Netherlands

- 4.1.1. In order to collect information on the SVD-monitoring the Animal Health Service (AHS) in Boxtel and the ID-DLO-Institute in Lelystad were visited. Reference is made to the report on a veterinary mission to the Netherlands, carried out 27-30 November 1995 (ref. VI/8823/95) during which observations about the operation of the monitoring programme for the presence of SVD in the Netherlands were made.
- 4.1.2. Both laboratories are involved in the operation of the programme. The AHS laboratory is testing the blood samples by ELISA, whereas re-testing of blood samples taken in herds from where positive ELISA results have been obtained is done at the ID-DLO laboratory where a SNT is in use. Both laboratories operate at high standards and internal and external quality control procedures are in place.
- 4.1.3. The results for the period 1995 – 1997 are as follows:

year	number of farms	number of blood samples	positive samples (SNT)	positive re-testing
1995	26.000	760.518	618	0
1996	22.800	705.902	342	0
1997	21.000	574.246	195	0

- 4.1.4. The monitoring programme is still carried out in the same manner as described in the report of the mission carried out in 1995. This

includes the organisation of the programme, the sample size in relation to the herd size, the interpretation of test results, in particular the decision tree defining criteria for re-testing, and the definition of singleton reactors.

- 4.1.5. A representative from the AHS explained that increased efforts have been made to ensure randomising of the sampling. Since November 1998 written instructions are in place to ensure equal distribution of the samples throughout the pig population. In addition, inspectors from the AHS visit around 1% of all the farms per year to check randomised sampling and genetic finger-printing of hair samples is in use to verify the origin of blood samples.

## **4.2. Movement control**

- 4.2.1. In the Netherlands each movement of pigs requires a sticker issued to the farmer by the AHS which is attached to the movement document. Until two months ago stickers issued used to be valid for four months in line with the interval at which SVD testing is carried out, i.e. three times per year. It was explained that the period of validity which is indicated on the sticker has been reduced from four months to one month in line with the requirement that every pig holding has to be clinically inspected by a practitioner once a month. A standard protocol sheet which has to be signed by the practitioner is in use. It was explained that no new stickers will be issued if the clinical examination or the blood sampling - which ever is due - have not been carried out in time.

## **4.3. Farm of origin**

- 4.3.1. The farm from which the piglets sent to Spain originate holds around 6,000 pigs including 1,490 sows and three boars. Weaning is done when the piglets are about 25 days old weighing around 7 kg. Each sow on the farm produces 25.2 piglets per year on average which is, as was explained, very high for Dutch standards. Around 34,000 piglets are produced per year of which 2,000 are sold to the national market whereas the bulk is sold to Spain.
- 4.3.2. In addition to the usual vaccination scheme the farm was operating a campaign 18 months prior to the mission using an American strain of live PRRS vaccine virus.
- 4.3.3. At the time of visit the farm was under restriction and no movement of pigs was allowed, either from the farm or onto the farm.
- 4.3.4. The mission team inspected the pigs for clinical symptoms but apart from some sneezing in weaned piglets no specific symptoms could be found. Both the owner and the veterinary practitioner in charge of the farm declared that no specific health problems could be identified during the last weeks prior to the mission.

- 4.3.5. No history of SVD is known on the farm. The farm is screened within the national SVD monitoring programme and records of serological tests were available for the period from 18.1.96 until 4.3.99. All results are negative except one blood sample which gave a positive result in the SNT in February 1997 but re-tested negative two weeks later.
- 4.3.6. At the time of the transport the farm was issued stickers valid until 24.3.99. This means that the pig population on the farm had been clinically inspected by the practitioner within one month prior to the transport.
- 4.3.7. Animal identification on the farm was found satisfactory. Weaned piglets and sows are individually identified, the piglets by means of an ear tag printed with both the unique herd (UBN) number and an individual number, whereas the sows are marked with an ear tag showing an individual hand written number. Suckling piglets are ear tagged once a week.

#### **4.4. Epidemiological and serological survey**

- 4.4.1. On 27.1.99 the farm of origin received 24 young sows from another Dutch farm. As part of the survey, 60 blood samples were taken on that farm and serologically tested for SVD with negative result.
- 4.4.2. During the mission the CA reported that all blood samples taken at the two farms which had received piglets from the farm of origin tested negative in the ELISA, whereas the results of the SNT were not yet available at the time of the mission.
- 4.4.3. The Dutch authorities declared that it could be useful to try to isolate virus from faeces obtained from those pens where the positive piglets were kept. This however would require further information from the Spanish authorities on the identification of the piglets which were reported to have tested positive for SVD virus.

#### **4.5. Transport of piglets**

- 4.5.1. According to the official health certificate the transport of the piglets to Spain started on 9.3.99 at 10.45h. The inspection report signed by the official veterinarian indicates that the piglets were clinically inspected at the time of loading and were found fit for transport. At the time of transport the piglets were about seven weeks old. The average weight was said to be 18 kg. After loading the truck and the trailer were sealed.
- 4.5.2. A copy of the route plan was made available to the mission team. The truck and the trailer carried two different consignments destined for two different fattening farms located in northern Spain. The estimated distances were 1510 km and 1630 km.

- 4.5.3. The Spanish authorities were informed about the two consignments by means of ANIMO-messages. The Dutch authorities reported to the mission team that due to an invalid address one of the two farms could not be located by the Spanish authorities. During the mission the correct address could however be identified.
- 4.5.4. The mission team inspected both the truck and the trailer on which the piglets were transported to Spain. Both vehicles had valid approval plates issued by the RVV. There was a water container on the trailer with a capacity of 600 l and both vehicles had sufficient numbers of water nipples and ventilators. The truck was equipped with a temperature recording system and from the documentary evidence provided it was estimated that loading density was in line with E.U. standards. The drivers who were in charge of the transport to Spain on 9.3.99 were not available during the mission. As part of the survey, interviews were however foreseen by the CA as soon as possible.
- 4.5.5. Both transport vehicles were found to be reasonably clean when inspected. However some dirt was found in parts of the loading area where access is particularly difficult. The Dutch authorities took smears for virus isolation on 23.3.99, the results were however not available at the time of the mission.
- 4.5.6. The cleaning and disinfection record books for both vehicles were made available. The mission team noted that neither of the books had records of cleaning and disinfection carried out in Spain immediately after the offloading of the piglets. The first records after this transport were entered on 12.3.99 and cleaning and disinfection was apparently carried out outside of Spain.
- 4.5.7. The records entered into the cleaning and disinfection book also indicate that shortly before the transport to Spain both vehicles have used a washing place in Italy which is also frequented by trucks transporting piglets into known SVD infected areas in Italy.
- 4.5.8. The Dutch authorities carried out an investigation of the transport routes which both vehicles have taken recently and a list was provided to the mission team. From this information and from the records entered into the cleaning and disinfection book it is evident that the vehicles have been to a number of Member States prior to and after the transport to Spain. However the list provided did not systematically give the names of the places where animals had been loaded or offloaded and in some cases only the name of the country where the vehicles have been was listed.
- 4.5.9. The farm of origin does not have a ramp for loading pigs and the built-in ramp of the transport unit was in use. The drivers were said not to have entered the farm at the time of loading.

#### **4.6. Cleaning and disinfection scheme in the Netherlands**

- 4.6.1. The mission team visited a place approved for cleaning and disinfection of trucks and located on the premises of a slaughterhouse. Although the washing place is mainly used by trucks delivering pigs to the slaughterhouse it can also be used by any vehicle transporting animals. Cleaning and disinfection is operated at a high professional level under the immediate control of inspectors employed by the company operating the slaughterhouse. A RVV representative is in charge of the overall supervision. There is a written protocol established laying down detailed operational provisions.
- 4.6.2. The disinfectant in use, P3 Incidin 05, was not approved for SVD virus. It was explained that due to the high resistance of the virus any disinfectant capable of inactivating the virus would put considerable damage to the vehicle and that only in times when the virus was demonstrated such disinfectant would be used.
- 4.6.3. The Dutch authorities submitted a list of approved places for cleaning and disinfection of vehicles to the mission team.

### **5. CONCLUSIONS**

#### **5.1. Cause of mortality**

- 5.1.1. No specific post mortem reports have so far been made available by the Spanish authorities. It is at present impossible to say which was the cause of the high mortality observed in the consignment. SVD does not usually cause death and no typical symptoms associated with the disease have been observed in the consignment. It seems safe to conclude that SVD should not be considered to have caused death in such a high number of piglets. Animal welfare findings are so far incomplete, for example no drivers' reports are available to exclude unusual events during the transport, and do not allow definitive conclusions.

#### **5.2. Origin of the infection**

- 5.2.1. Although the Dutch CA have applied appropriate measures to investigate the situation these were not completed at the time of the mission. In view of the absence of further epidemiological evidence it is impossible to say with certainty where the SVD infection reported in the consignment originated. The absence of antibody titres demonstrated at the time of the arrival of the consignment in Spain suggests that the onset of the infection was acute. The documentary evidence provided during the mission indicates that the transport vehicles have been to Italy and have used a cleaning and disinfection place which is also used by trucks transporting pigs to SVD infected areas in Italy. Further conclusions might be drawn as soon as the identification of the genomic characteristics of the virus reported to be

isolated in Spain is completed. This study is currently under way in the E.U. reference laboratory in Pirbright.

### **5.3. Cleaning and disinfection**

- 5.3.1. From the documentary evidence available at the time of the mission it appears that the truck and the trailer were not cleaned and disinfected in Spain immediately after off-loading of the piglets.
- 5.3.2. In the light of the observations made in the Netherlands it appears doubtful whether the Member States currently operate a cleaning and disinfection scheme capable of effectively inactivating such highly resistant virus like the SVD agent. The absence of effective inactivation could impose a serious risk of spreading the virus throughout the Member States by means of animal transports. With a view to the high resistance of the SVD virus it appears questionable whether effective inactivation is at all carried out anywhere in the Member States as such a regime would have a detrimental effect on the transport vehicles.

## **6. RECOMMENDATIONS**

### **6.1. To the Dutch veterinary authorities:**

The mission team recommends:

- 6.1.1. that the epidemiological enquiry be continued with all necessary intensity until the source of the original infection is identified. This would include a complete and precise picture of all the movements of the transport vehicles involved in the shipment of the two consignments to Spain during four weeks prior to the transport, and a complete report of the drivers.
- 6.1.2. that the Member States where the vehicles have been prior to and after the transport to Spain are informed about the exact routes of the vehicles.

### **6.2. To the Spanish veterinary authorities:**

The mission team recommends:

- 6.2.1. that detailed results of the post mortem examination of the six piglets taken from the two consignments originating from the Netherlands be provided.
- 6.2.2. that further information be provided on the identity of the three piglets from which virus was isolated. This would enable the Dutch CA to try to isolate virus from faeces collected in those pens of the farm of origin where these piglets were kept.

- 6.2.3. that further information be provided on any cleaning and disinfection of the truck and the trailer possibly carried out in Spain immediately after off-loading of the piglets.

### **6.3. To the European Commission:**

The mission team recommends:

- 6.3.1. that the Commission services study as a matter of urgency all aspects of cleaning and disinfection of all means of transport used for livestock with a view to issuing guidelines with European Union-wide application. The suitability of construction material used for means of transport should also be discussed.