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FINAL REPORT OF AN AUDIT

CARRIED OUT IN

THE NETHERLANDS

FROM 28 JANUARY TO 06 FEBRUARY 2013

IN ORDER TO EVALUATE THE IMPLEMENTATION OF CONTINGENCY PLANS IN RELATION TO ANIMAL HEALTH, INCLUDING PROVISIONS ON THE PROTECTION OF ANIMALS DURING DEPOPULATION FOR DISEASE CONTROL

In response to information provided by the Competent Authority, any factual error noted in the draft report has been corrected; any clarification appears in the form of a footnote.

Executive Summary

This report describes the outcome of a Food and Veterinary Office (FVO) audit in The Netherlands carried out between 28 January and 6 February 2013, as part of the FVO audit programme. The objective of this audit was to evaluate the resources and arrangements put in place to implement the European Union requirements for contingency planning, including provisions on the protection of animals during depopulation, in the event of one or more outbreaks of epizootic diseases.

Overall the report concludes that:

Competent authorities have been designated and sufficient legal powers are available to develop contingency plans and to control epizootic outbreaks. Formal agreements in place between the animal health and public health authorities form a good basis for effective cooperation and coordination in dealing with outbreaks of zoonotic diseases.

The competent authorities are well prepared for handling minor and major outbreaks of epizootic diseases. There is a permanent structure for dealing with suspect outbreaks, specially trained Front Teams handling all confirmed outbreaks and contracts are maintained for equipment and services. However, weaknesses were observed with regard to a lack of documented procedures for African swine fever, outbreaks in equines and the particular measures necessary for controlling the spread of diseases transmitted by vectors. A cost-sharing scheme between the industry and the government for the financing of outbreak eradication helps underpin the importance of swift notification and diagnosis to minimise the impact of outbreaks.

The relevant diseases are notifiable under national legislation and the active and passive surveillance programmes should provide reliable information about the presence or absence of relevant diseases. Prompt action is taken when a suspicion is notified. The national reference laboratory has the capability and capacity to reliably support the competent authorities in detecting and controlling epizootic diseases. Staff regularly attend relevant training, including desktop and field exercises. Although few of these exercises include all levels of staff which would be necessary to meet the requirements for alarm drills twice per year as required for certain diseases under EU Directives the system has been tested during recent outbreaks. High levels of biosecurity are widely practised and enforced by industry-driven biosecurity schemes and NVWA inspectors.

Work is in progress to update contingency plans, instructions and contracts with specialised companies to include legal references to Article 18 of Council Regulation (EC) No 1099/2009. The CA has already put in place a system for recording and reporting after depopulation, supervision, and training. Current arrangements allow the production of an action plan before depopulation and the available methods of killing are in compliance with Council Regulation (EC) No 1099/2009. However, the electrocution system for pigs and the corresponding contract and instructions need further refinement to ensure that it meets the requirements in EU legislation.

There should be sufficient ABP processing capacity in Netherlands to dispose of animals that would have to be killed to control epizootic disease outbreaks in all but the most severe epizootic crises. The animals would be processed in line with the requirements of Regulation (EC) No 1069/2009. The requirements of Article 72 (1),(4) and (5) and Annex XVII (13) and (14) of Directive 2003/85/EC are met.

The report makes recommendations to the competent authorities aimed at addressing areas in which further improvements are required.

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Abbreviations and definitions used in this report

Abbreviation	Explanation
ABP	Animal By-Products
AHS	African Horse Sickness
AI	Avian Influenza
ASF	African Swine Fever
BT	Bluetongue
CDB	Central Database
CSF	Classical Swine Fever
CVI	Central Veterinary Institute, Lelystad
DG(SANCO)	Health and Consumer Directorate-General
EZ	Ministry of Economic Affairs
FMD	Foot-and-Mouth Disease
FVO	Food and Veterinary Office
IKB	Integrated Chain Management (*Integrale Keten Beheersing*)
ISO	International Organisation for Standardisation
ND	Newcastle Disease
NHIC	NVWA Incident and Crisis Management Handbook
NRL	National Reference Laboratory
NVIC	NVWA Incident and Crisis Centre
NVWA	Netherlands Food and Consumer Product Safety Authority
PCR	Polymerase-Chain Reaction
SCAHAW	Scientific Committee of Animal Health and Animal Welfare
SOP	Standard Operating Procedure
TSE	Transmissible Spongiform Encephalopathy
UBN	Unique Holding Number (*Uniek Bedrijfs Nummer*)

1 Introduction

This audit took place in the Netherlands from 28 January to 6 February 2013 and was undertaken as part of the Food and Veterinary Office (FVO) planned audit programme. The audit team comprised three auditors from the FVO. The team was accompanied throughout the audit by representatives of the Ministry of Economic Affairs (EZ) and the Netherlands Food and Consumer Product Safety Authority (NVWA) which are the competent authorities within the scope of this audit.

2 Objectives

The objective of this audit was to evaluate the resources and arrangements put in place to implement the European Union requirements for contingency planning, including provisions on the protection of animals during depopulation, in the event of one or more outbreaks of the following epizootic diseases: Foot-and-Mouth Disease (FMD), Bluetongue (BT), Classical Swine Fever (CSF), African Swine Fever (ASF), Swine Vesicular Disease (SVD), African Horse Sickness (AHS), Avian Influenza (AI), Newcastle Disease (ND) and a number of other diseases.

A secondary objective was to gather information and to identify areas of best practice in relation to a number of issues relevant to epizootic disease control but not explicitly specified in EU legislation. Such issues include routine monitoring for epizootic disease, the deployment of risk analysis with subsequent determination of alert levels and Member State requirements for biosecurity measures on farms.

Whilst contingency planning for all of these diseases is included within the scope of this audit, the audit concentrated, in particular, on ASF, and also looked at FMD and AI. ASF is considered to be a current risk due to the presence of disease in Russia. FMD is one of the most difficult diseases to contain and affects several livestock species. AI was chosen as an example of a poultry disease where specific requirements for contingency plans are laid down in European legislation.

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

Meetings/visits		No.	Comments
Competent authorities	Central	2	Opening and closing meetings with the Ministry of Economic Affairs, the Netherlands Food and Consumer Product Safety Authority and other relevant competent authorities
	Others	4	NVWA Incident and Crisis Centre, National Service for the Implementation of Regulations, one NVWA Expert Team and one NVWA Front Team
Laboratory		1	The Central Veterinary Laboratory, which is the national reference laboratory for all diseases within the scope of this audit
Holdings		2	One poultry farm and one pig farm
Markets and assembly centres		1	One assembly centre for pigs
Slaughterhouses		2	One slaughterhouse for poultry and one for pigs
Other sites		6	The Animal Health Service, four contractor for equipment and services and one rendering plant

3 Legal Basis

The audit was carried out under the general provisions of EU legislation and, in particular:

- Article 45 of Regulation (EC) No 882/2004 of the European Parliament and of the Council of 29 April 2004 on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules.

Full legal references to EU legal acts quoted in this report are provided in Annex 1 and refer, where applicable, to the last amended version.

4 Background

Given the potential impact of outbreaks of epizootic disease, it is important that Member States can react immediately and effectively in a co-ordinated manner and in co-operation with neighbouring countries. EU legislation requires MS to have contingency plans in place to combat such outbreaks so as to reduce their adverse consequences. Of critical importance to the suppression of an outbreak of epizootic disease, is the swiftness of initial diagnosis and the deployment of the first stages of the contingency plan.

The table below lists the most recent reported outbreaks of diseases of relevance for this audit in the Netherlands.

Disease	**Year of most recent occurrence**
AI	Highly pathogenic AI: 2003 (H7N7)
	Low pathogenic AI: 2012 (H7N7 free-range laying hens) [1]
ND	2010 (homing pigeons) in commercial poultry: 1992
BT	2009 (BTV-8)
FMD	2001
CSF	1998
ASF	1986

(source: World Organisation for Animal Health)

5 Findings And Conclusions

5.1 Competent Authorities

Legal requirements

Regulation (EC) No 882/2004 lays down rules for the performance of official controls; in particular

1 In their response to the draft report the competent authority noted that in 2013 there had been two outbreaks of LPAI in free-range laying hens since this audit.

Article 4 requires the designation of competent authorities; co-ordination and co-operation between and within competent authorities and that sufficient legal powers are available to the competent authorities. The availability of sufficient legal powers for the implementation of contingency plan is specified in most of the relevant Directives (see Annex 2). In addition Council Directive 2003/85/EC (Article 74 (3)(d), (g) and (i) and Annex XVII (6) requires close cooperation with environmental authorities and enforcement bodies in relation to FMD control and Council Directive 2005/94/EC on the control of avian influenza (Article 62 (3)) requires close cooperation between the competent authorities responsible for the different sectors, particularly those in charge of animal health, public health, environmental matters and health and safety of workers.

Findings:

5.1.1 Competent authority structure

The competent authorities have been subject to several re-organisations, mergers and re-namings in recent years and the systems of official controls for animal health and animal welfare are no longer exactly as described in the country profile for the Netherlands from 2010 (accessible here: http://ec.europa.eu/food/fvo/country_profiles_en.cfm).

The Ministry of Agriculture, Nature and Food Quality merged with the Ministry of Economic Affairs, Agriculture and Innovation to form the Ministry of Economic Affairs and Food Quality in the autumn of 2011 and the new ministry changed its name to the Ministry of Economic Affairs (EZ) in November 2012.

As of January 2013 the structures of relevance for this audit are as follows. The central competent authority is the EZ, which is responsible *inter alia* for drawing up the contingency plans which are required under EU legislation, and for policy making regarding animal disease outbreaks. The Chief Veterinary Officer (CVO) is placed in the EZ and reports directly to the Minister.

The NVWA is an Inspectorate-General in the EZ. Its main tasks are supervision, risk assessment and risk communication. The NVWA is also responsible for the implementation of veterinary tasks as well as for incident and crisis management and for policy advice to the EZ. NVWA is the result of a merger of the former General Inspection Service, Food and Consumer Product Safety Authority and Plant Health Service. It has more than 2100 full time staff, of which 231 full-time equivalents are official veterinarians and a further 50 full-time equivalents are contracted private practitioners. The NVWA has a centralised structure but there are a number of local NVWA offices set up to provide office space and equipment for official staff when carrying out tasks in the local areas.

The NVWA has a permanent Incident and Crisis Centre (NVIC) with 16 highly trained staff. The NVIC is available 24 hours a day seven days a week to deal with all notifications of infectious diseases and outbreak eradication. The NVIC drafts operational manuals and work instructions linked to the contingency plans, carries out risk assessments following disease outbreaks in other countries, collates and reports monitoring data to the Commission and other international organisations and defines the requirements for contracts with suppliers and laboratories. It is also responsible for organising and training the Expert Teams which are sent out to investigate all notified suspicions and Front Teams which handle (on site) the first 72 hours of a confirmed outbreak. The NVIC has access to specially trained personnel who can be called upon to deal with a suspicion or an outbreak: 60 approved animal disease experts, all of whom are official veterinarians; 16 Front Teams (each with six persons); 17 crisis managers trained to lead regional crisis coordination centres and 32 heads of departments in regional crisis coordination centres.

The Product Board for Poultry and Eggs and the Product Board for Livestock and Meat are in charge of e.g. the implementation of AI monitoring, vaccination against ND (poultry) , biosecurity levels and monitoring of SVD and CSF (pigs). These product boards are semi-autonomous bodies, which may have regulatory powers within their respective fields of competence delegated to them by the EZ (under the the Health and Welfare of Animals Act). They may lay down binding rules on their own initiative or in cooperation with the government and they are responsible for supervision and enforcement of these rule and can issue penalties. The supervision of these rules is often carried out by an organisation providing guarantees on the food chain, Integrated Chain Management (*Integrale Keten Beheersing* – IKB) which issues quality certificates for compliant holdings. These product boards will be phased out in 2014 and their current tasks will be divided between the EZ and the industry.

5.1.2 Legal powers available to the competent authorities

A number of Dutch legal provisions give the necessary power to the competent authorities to implement the measures necessary for controlling epizootic disease outbreaks. These powers include: the right of entry into premises, imposition of restrictions on animal movements, the right to require cleaning and disinfection, the right to impose protection zones and surveillance zones, to order the killing of animals etc. The legislation also sets out obligations in respect of the notification of suspicion of animals diseases.

The basic legislation is the Health and Welfare of Animals Act of 24 September 1992 (*Gezondheids- en welzijnswet voor dieren)*. The Decision Suspect Animals (*Besluit verdachte dieren*) and the Ministerial Order on prevention, monitoring and control of contagious animal diseases, zoonoses and TSEs (*Regeling preventie, monitoring en bestrijding besmettelijke dierziekten en zoönoses en TSEs*) provide the main legal bases for measures when a serious infectious disease is suspected by an official.

The new Law on Animals of 19 May 2011 comprises general provisions for *inter alia* killing of animals, animal identification, notification of animal diseases, prevention and control of infectious animal diseases and zoonoses. However, neither those articles dealing with the issues listed above nor the corresponding implementing decisions had entered into force at the time of this audit.

5.1.3 Cooperation between and within competent authorities in development of contingency plans

There are established communication and cooperation procedures in the EZ for the development of the contingency plans which include consultation of the NVWA, the national reference laboratory, stakeholders and the Ministry of Health (where relevant). Within the EZ, Directorate-General AGRO, in particular the Department for Animal Supply Chain and Animal Welfare, is the policy department in the veterinary field. It is responsible for drafting the contingency plans and for implementing the consultation procedures.

The NVWA has a long-term contract with the Central Veterinary Institute in Lelystad (CVI) regarding the functions as national reference laboratory (NRL) and analytical laboratory *inter alia* for all official samples for the diseases within the scope of this audit.

There is a signed agreement between the Ministry of Health and the EZ regarding zoonotic diseases and a "Protocol for Regional Cooperation, Zoonoses and Food Borne Infections" between the implementing bodies, which deals with *inter alia* reporting, measures, contact points and other

procedures for handling such a suspicion or outbreak.

EZ and NVWA have agreements with Customs on how to check for important animal diseases at the major airports since 2010. An amended work instruction, which has recently been drafted by the NVWA and Customs, provides detailed instructions on how risk assessments are to be transmitted to Customs and the risk based levels of controls on incoming luggage. This instruction specifically covers checks linked to AI, FMD, CSF and ASF.

The NVWA has signed an agreement with the Associations of Community Health Services, the National Institute for Public Health and the Environment and the private Animal Health Service on prevention and outbreak management of zoonotic diseases. Within the framework of this agreement the same parties have established a "Protocol for Regional Cooperation, Zoonoses and Food Borne Infections", which deals with *inter alia* reporting, measures, contact points and other procedures for handling a suspicion or outbreak.

Section 5.2.3 below, outlines the responsibilities of the various competent authorities for dealing with an epizootic outbreak, as designated in the contingency plans.

Conclusions on Competent Authorities

Competent authorities have been designated and sufficient legal powers are available to develop contingency plans and to control epizootic outbreaks in accordance with the requirements of Regulation (EC) No 882/2004 and the disease-specific Directives. The formal agreements in place between the animal health and public health authorities form a good basis for effective cooperation and coordination in dealing with outbreaks of zoonotic diseases.

5.2 Contingency Plans

Legal requirements

Requirements for Member States to have contingency plans to control disease outbreaks are required for the following diseases: Foot-and-Mouth Disease (Council Directive 2003/85/EC), Bluetongue (Council Directive 2000/75/EC), Classical Swine Fever (Council Directive 2001/89/EC), African Swine Fever (Council Directive 2002/60/EC), Swine Vesicular Disease and a number of other diseases (Council Directive 92/119/EEC), African Horse Sickness (Council Directive 92/35/EEC), Avian Influenza (Council Directive 2005/94/EC) and Newcastle Disease (Council Directive 92/66/EEC). A summary of some specific requirements of each is provided in Annex 2.

Requirements relating to holding registration, animal identification and movement controls for cattle, sheep and pigs are laid down in Regulation (EC) No 1760/2000, Council Regulation (EC) No 21/2004 and Council Directive 2008/71/EC respectively, and associated implementing measures.

Findings

5.2.1 Coverage and Approval

The contingency plans are drafted and kept updated by the EZ. Once the Director of the Animal Chain and Welfare Department, the Director-General of DG AGRO and the CVO have given their

final approval the approved plans are published on the Government website: http://www.rijksoverheid.nl/onderwerpen/dieren/preventie-en-bestrijding-dierziekten/beleidsdraaiboeken-dierziekten.

On the Government website there are also three Handbooks: for Crisis Decision Making (draft 2010); Communication During Crises (2008); and Financial Management in a Crisis Situation (2005). The FVO team noted that:

- of the 15 contingency plans required under EU legislation, 14 plans had been approved by the EZ. Ten of these plans were available only in English;
- the contingency plans published on the internet are clearly marked with an issuing date and (with the exception of the 2002 plans in English) a version number;
- there are comprehensive contingency plans for FMD (2005), CSF (2007) and AI (2007) published on the Government website as well as basic contingency plans for SVD, PPR, RP, LSD, SGP, VS and RVF (all from 2002) available only in English. In addition to those contingency plans available on the Government website, basic contingency plans in English for BT, AHS, ND and EHD were submitted to the Commission in the years 2000 (ND/AI) and 2002;
- there has never been a contingency plan for ASF. However, the new draft plan for CSF also covers ASF;
- amended contingency plans for FMD and CSF/ASF have recently been sent out for consultation. The EZ stated that comprehensive contingency plans for AHS, BT, SVD and RVF are being drafted;
- the contingency plans describe command structures (all plans) and supplies of equipment (the plans from 2000 and 2002) which are different from those in operation today;
- the requirements in EU legislation to update the contingency plans for AI, CSF, ASF and FMD every five years have been met for AI and CSF but the FMD plan from 2005 is only now being revised after eight years.

5.2.2 Documentation

Most of the contingency plans are available to stakeholders and the general public via the Government website. All national legislation relevant for this audit is publicly available on the government website: www.overheid.nl and rules issued by the Product Boards are published on their website: www.pve.nl.

The NVIC in the NVWA is responsible for drawing up and updating operational manuals based on the contingency plans and for issuing work instructions and forms. When approved, the manuals, work instructions and forms are published on the NVWA website: http://www.vwa.nl/onderwerpen/meest-bezocht-a-z/dossier/voorkomen-en-bestrijden-van-dierziekten/draaiboeken.

In addition to the disease-specific operational manuals on the NVWA website there is an

"Operational Manual for Suspect Cases", which is available on the NVWA intranet. This manual gives guidance to the NVWA/NVIC Expert Teams (first-response investigation team) when carrying out the on-farm investigations following notifications of suspect serious diseases. The current version of the manual describes AI, BT, CSF, FMD, ND, SVD and a number of other diseases not covered by the scope of this audit. The NVWA has recently started the process of updating this manual with the intention of finishing this work by the end of 2013. The updated version is planned to cover detailed information also on AHS, ASF and RVF.

Each administrative assistant who has been specially trained for participation as administrator in a Front Team has a folder with hard copies of all relevant operational manuals, work instructions and forms. When an instruction is amended by the NVWA a replacement copy of the instruction is sent out to each of these administrative assistants.

The FVO team noted that:

- the NVWA has issued operational manuals, work instructions and forms for five diseases (FMD, CSF, AI, SVD and ND). These manuals are very comprehensive and together with the corresponding instructions and forms they provide good guidance for all aspects of outbreak control;

- there were no operational manuals or work instructions for dealing with outbreaks of the other nine diseases for which the EZ has basic contingency plans. For BT there were three instructions in relation to export and import but no documents on handling an outbreak;

- the Operational Manual for Suspect Cases describes the symptoms and diagnostics for a number of diseases, provides forms, work instructions and process charts for the initial farm visit (clinical examination, sampling, sample dispatch, census, description of holding), any follow-up visit and for closing the notification file, should the test result be negative;

- when NVIC initiated investigations of notified disease suspicions or measures to control an outbreak it was done using the practical and detailed operational manuals and work instructions rather than the contingency plans. All official staff interviewed were well aware of their roles and tasks in a suspected or confirmed outbreak;

- evidence was seen that work instructions had been updated based on lessons learned during disease investigations and outbreaks;

- the correct versions of the very recently updated work instructions for a particular killing method for swine were available in the files kept by the Front Team administrator interviewed by the FVO team;

- the work instruction for suspicions of notifiable diseases in slaughterhouses, which had been updated recently, was not fully accurate with regard to references to existing contingency plans but covered the relevant actions needed by the official veterinarian in order to handle and contain a suspect case in a slaughterhouse;

- although ASF is mentioned among the possible differential diagnoses in the operational manual for CSF, there are no instructions in the CSF manual, the Operational Manual for Suspect Cases or in the instruction for official veterinarians in slaughterhouses to consider requesting analysis also for ASF when CSF-suspect samples are submitted to the NRL for

analysis. There were no suspect samples for ASF received in the CVI during 2012;

- although specifically required under EU legislation there is no operational manual and there are no staff instructions for dealing with ASF and, the otherwise very good, Operational Manual for Suspect Cases does not include a description of symptoms and diagnostics for ASF;

- although specifically required under EU legislation there are no staff instructions for dealing with a confirmed outbreak of AHS, BT or for outbreaks of the diseases covered by Council Directive 92/119/EEC (except SVD).

5.2.3 Competent authority command structure during an epizootic outbreak

The command structure during a crisis is laid down in the Handbook for Crisis Decision Making of the (then) Ministry of Economic Affairs and Food Quality published in 2011. The handbook describes not only the decision making and crisis organisation of the Ministry but also the interactions with other Ministries and authorities, including the national zoonosis coordinator, in a crisis scenario. This handbook makes reference to the National Handbook for Crisis Decision Making by the Ministry of the Interior and Kingdom Relations, which would apply in a major national crisis.

EZ DG AGRO has its own Handbook for Crisis Decision Making from December 2012, which deals with scenarios linked to animal diseases, zoonoses, food related crises and radiation accidents.

The NVWA/NVIC is responsible for the organisation, implementation, control and monitoring of all work related to animal diseases. Once a disease outbreak has been confirmed an NVWA Front Team is dispatched to organise, supervise and enforce all measures on farm (see 5.3.2.1.).

A draft Incident and Crisis Management Manual (NHIC) of the NVWA outlines *inter alia* how and when an upgrading from an incident to a crisis should be made. The draft NHIC is comprehensive and describes the roles, tasks and remits of the personnel involved at the different stages of an incident/crisis. It outlines those situations when an NVWA Crisis Centre with members from several NVWA departments would be established, in addition to the NVIC.

Once a serious incident has been re-classified as a crisis (in accordance with criteria in the NHIC) the overall responsibility for crisis management is transferred to the EZ or to the Ministry of Health (if the zoonotic aspect is the most important risk). In case a crisis is so complex that several ministries need to be involved the national crisis organisation, led by the Ministry of Security and Justice, may take over.

The FVO team noted that:

- the (draft) version of the Handbook for Crisis Decision Making (Ministry of Agriculture, Nature and Food Quality) published on the Government website is substantially different from the published brochure version from July 2011 (Ministry of Economic Affairs and Food Quality) provided electronically by the competent authorities in preparation for this audit;

- the Handbook for Crisis Decision Making (2011) deals in general terms with the processes applicable to crises within one or more of the areas under EZ. Reference is made to a

Handbook for Crisis Decision Making for DG AGRO which is the DG responsible for handling crises dealing with animal diseases;

- the DG AGRO Handbook for Crisis Decision Making is fully up-to-date and includes *inter alia* definitions of functions and tasks, contact details, organisation charts, guidelines for coordination with the Ministry of Health, and an overview over related handbooks from competent authorities and departments;

- the published Handbooks for Communication During Crises (November 2008) and Financial management in Crisis Situations (August 2005) have not been amended to take into account the substantial changes since made to the competent authority structures.

5.2.3.1 National Disease Control Centre

The NVIC, which is a permanent function, handles all (serious) incidents related to confirmed outbreaks while keeping the EZ and the CVO informed as well as the Ministry of Health, where relevant. All decisions on movement restrictions and other legal measures are taken by the EZ, which is also responsible for contacts with EU Member States, the Commission and other international organisations.

All notifications are investigated on-farm by dedicated NVIC Expert Teams comprising i) one of 60 official veterinarians who have been trained and approved by the NVIC as animal disease experts, ii) the private practitioner for the holding and iii) a representative from the Animal Health Service (in case a serious disease such as CSF, AI, ND or FMD is suspected).

Confirmed outbreaks are dealt with on site by one of the 16 specially trained NVWA Front Teams, which each comprises six persons from different divisions in the NVWA. The Front Team is authorised to act on its own, with the assistance of the contracted service providers, to handle e.g. depopulation and tracing during the first 72 hours of an outbreak, pending the setting up of a local disease control centre. If the measures take longer another Front Team will take over.

The FVO team noted that:

- staff is available at all times for Expert Teams and Front Teams and qualifications and training statuses for any additional staff are available in the NVWA personnel database;

- each Front Team comprises six persons: One coordinator (official veterinarian), one official veterinarian, one first co-worker, one sanitary worker, one administrator and one enforcer. Each function has well defined responsibilities and tasks, including *inter alia* communication, documentation, sampling, animal welfare and biosecurity;

- the EZ maintains contracts with suppliers of equipment and services which may be called in by the NVIC and the Front Teams to assist in handling an outbreak. The NVWA Front Team is ultimately responsible for animal health and welfare irrespective of which service is carrying out the activities;

- each notification to the NVIC starts a separate file (electronic and hard copy) which contains all relevant information about the holding until restrictions are lifted;

- communication procedures are laid down in manuals, and flow charts are available. These

include procedures for notification and information to national, local and international authorities and organisations.

5.2.3.2 Local Disease Control Centre

The EZ may decide to establish a regional coordination centre (=local disease control centre) to facilitate the handling of a larger outbreak. Such a centre, comprising clean and dirty areas, offices, showers *etc.,* would be built up from scratch in a suitable location within three days under the contracts maintained by the EZ.

The FVO team noted that:

- there is an agreement in place between the EZ and the military services for use of their land, electricity and water supplies and a contract with a phone company to provide an extra mast when a regional coordination centre is needed;

- each regional coordination centre would have a veterinary chief, a *Chef de Bureau,* and departments for screening, tracing, vaccination (where relevant), culling, intake of samples, marking, cleaning/disinfection/pest control, re-stocking, personnel and supplies. There are currently 32 staff who have been specially trained by the NVIC to head such departments;

- a regional coordination centre would also have a Crisis Manager responsible for coordination, liaising with the EZ / NVWA, contacts with local authorities and accountable for all administrative and financial actions. There are currently 17 staff who have been specially trained by the NVIC as Crisis Managers.

5.2.4 Financial provisions

Government expenditure for the control of notifiable disease is financed from the Dutch Animal Health Fund (under the EZ budget), which is based on a cost-sharing scheme between the sector and the government. This fund receives most of its finances through the respective Products Boards based on levies on animals and/or animal products from the production sectors (cattle, pigs, sheep/goat, poultry). It also receives funding from the EZ and handles compensations from the EU (where relevant).

This cost-sharing scheme covers the costs for monitoring programmes, vaccination campaigns and all direct costs for diseases outbreaks, such as sampling/testing; value of culled animals, destroyed animal products and feed, disposal of carcasses, temporary farm staff, veterinary costs, cleaning and disinfection. Should the costs for an outbreak exceed the ceiling contribution laid down for each particular sector, additional costs would be covered by the government. Provisions for the cost-sharing scheme are laid down in a covenant, which is renewed every five years. The current covenant covers 2010-2014.

The EZ has contracts with valuers who will carry out the valuations of animals and products. As guidance for the valuers the Agricultural Economic Institute provides value charts which are updated in every crisis situation.

The FVO team noted that:

- the sectors carry 100% of the costs for investigations of suspect cases and direct control costs in case of an outbreak up to a specified ceiling cost per sector over a five year period;

- the costs for monitoring and eradication programmes and for the availability of staff and equipment via contracted companies to respond in emergencies are split 50/50 between the government and the sectors;

- the government covers 100% of the cost for the control of notifiable diseases in "backyard" and hobby animals, including horses;

- financial losses to an outbreak farm or an establishments in restriction zones caused by it not being able to trade for a prolonged period of time are not covered.

5.2.5 Establishment and enforcement of protection and surveillance zones

A suspect farm would be subject to movement restrictions issued verbally by the Expert Team and confirmed in writing by the NVWA pending the results of laboratory testing. As soon as a suspicion is confirmed protection and surveillance zones will be installed by the EZ according to the respective Directives.

Once a serious disease has been confirmed national legislation also allows the EZ to order a national standstill of all or certain animal movements for 72 hours. These legal provisions have been established in cooperation with the industry.

The FVO team noted that:

- through the National Service for the Implementation of Regulations the NVIC has prompt access (within two hours) to maps, locations of holdings and estimated numbers of animals on a particular holding or on all holdings within a defined zone;

- each time the NVIC decides which natural boundaries should be used to define the zones the National Service for the Implementation of Regulations will re-draft maps which will be included in the decision issued by the EZ;

- each Front Team or Regional Coordination Centre has staff assigned to the coordination and supervision of hygiene measures and the enforcement of e.g. biosecurity measures. There is a contract in place for printing of signs;

- all commercial farms are encouraged to maintain facilities to cover for a six-week standstill in animal movements. Within this period the EZ does not foresee any derogations from movement restrictions;

- in a major crisis the EZ can request assistance from the military services.

5.2.6 Communication procedures during an outbreak

The FVO team noted that:

- crisis communication procedures, including communication with media, are described in

several documents from the Ministry and from the NVWA created over a period when several re-organisations have taken place. These documents overlap and sometimes differ - and often refer to structures and functions in the competent authorities under different names;

- each Front Team is briefed and de-briefed by the NVIC and each Front Team and Regional Coordination Centre has a clear distribution of tasks among staff, including the communication with media, farmers, health services and the central competent authorities;

- there is a contract in place for urgent psychological assistance. This service is available to staff and to farmers 24 hours a day, seven days a week during an outbreak.

5.2.7 Availability of Epidemiological expertise

Four expert groups have been nominated by the EZ for avian diseases (AI and ND), ruminant diseases (FMD, BT, RP), swine diseases (CSF, ASF, SVD) and equine diseases (all notifiable equine diseases). These groups all have the same chairman and comprise at least one representative from the CVL. They function as "think tanks" and are not directly involved in the implementation of the contingency plans but may be consulted in the drafting of contingency plans.

The FVO team noted that:

- the expert groups have issued advice *inter alia* linked to the preparation of a contingency plan for AHS in 2008, the 2009 new influenza A(H1N1) in pigs in Mexico (combined expert group for poultry and swine, two reports from 2009) and equine infectious anaemia in neighbouring countries (2010).

5.2.8 Animal identification and movement control

Each animal holding is allocated a unique holding number (*Uniek Bedrijfs Nummer*- UBN) by the National Service for the Implementation of Regulations. In addition this Service operates the Central Databases (CDB) for bovine animals and sheep and goats. The Animal Health Service operates the central pig holding registration and batch movement control database for pigs. It is planned to also move operation of the pig database to the National Service for the Implementation of Regulations in the near future.

A UBN is allocated to a single site where the animal housing is located and mixed farms with different species of animals can share a single UBN. Where animal housing is separated physically e.g. located either side of a public road, a separate UBN number is allocated to each separate site. The farmer must then notify all movements between the sites with separate UBN numbers. In the case of cattle, sheep and goats, a single UBN number may cover geographically distributed pastures. Movements between such pastures covered by a single UBN number do not have to be notified. The number of active livestock holdings is as in the following table:

Species	Number of holdings	Number of animals (millions)
Cattle	31752	4
Sheep	12529	1
Goats	3541	0.38
Pigs	6525	12.4
Poultry	2266	97

Movements (both onto a farm and off a farm) must be notified to the CDB within 3 working days in the case of cattle and within one week in the case of sheep and goats. Farmers may provide notifications of movements of cattle, sheep and goats to the CDB via the internet using web based access or management software. It is also possible to notify movements using a telephone voice response system. In the case of pigs movements must be registered within two days with the Animal Health Service. Pig farmers may use electronic data transfer, a voice response system, emails/online notification or faxes to notify movements. In addition there are restrictions on the movement of pigs between farms of different health statuses which are implemented by the Animal Health Service (see section 5.3.5 on biosecurity measures in place on animal holdings).

All sheep and goats must be electronically identified according to Regulation (EC) No 21/2004. This includes lambs less than 12 months of age intended to be slaughtered which are not permitted to be identified with non-electronic ear tags. When sheep and goats move from a farm to a market or collection centre they are not permitted to move to another farm within the Netherlands. The CDB of the National Service for the Implementation of Regulations has recorded individual movements for sheep and goats since January 2010;

Movements of poultry are recorded by the Product Board for Poultry and Eggs which operates a producer funded database and registers poultry farms. In the case of horses there is a central database for registration of identification with transponders but there is no registration of holdings with horses or registration of horse movements.

The FVO team noted that:

- at the time of leaving the holding for slaughter all pigs must be identified with an ear tag which contains the UBN of the holding of departure and an individual identification number for each pig. In addition pigs which are moved from one farm to another will be identified with an ear tag which indicates the holding of birth. The presence of these tags was confirmed at the assembly centre visited;

- no sheep or goat holdings were visited during the audit. However, at the assembly centre visited the official veterinarian informed the audit team that she had recently been issued with a device to read electronic tags and had been trained in its use;

- the CDB for cattle has full forward and backward tracing functionality and can reconstruct lists of animals present at a holding/market/collection centre at any particular date. It can also be used to record information such as vaccinations administered. It could be used to record such information in the event of vaccination for an epizootic disease outbreak e.g. for FMD. Passports for cattle are not routinely used and are only issued on request for the purposes of trade to other Member States or export;

- up until 1st January 2013 the Animal Health Service had been matching information on pig movement documents provided by the buyers and sellers of pigs. This work entailed considerable administrative effort and when discrepancies were identified warning letters were issued to encourage correct completion of these documents. Farmers will now be encouraged to take more responsibility for the correct completion of these documents by enforcement action being taken by NVWA inspectors in the case of future non-compliance;

- locations where pigs are kept as companion animals must also be registered as holdings. The competent authority informed the audit team that they monitor the trade in such animals in the press and internet auction sites in order to identify such locations;

- the CDB has a flagging system which blocks further movement if discrepancies are noted, such as animals moved off one holding but not registered in time at the receiving holding. The owner is also issued with a penalty to correct a registration or enter a registration outside the deadline;

- the CDB system can be used to define 21 compartments where animal movement is or is not allowed. It can also be used to check that a move to a market is always followed by a move to slaughter and not to another holding. In addition, the system will warn the owner when a new movement is entered too soon (<21 days) after an animal has arrived in the holding.

5.2.9 Availability of Equipment

A large number of companies are contracted by the EZ to assist the NVWA with equipment, staff or services in investing a suspicion or managing an outbreak. The areas concerned include: cleaning, disinfection and materials; waste transport; destruction of waste materials, personnel for handling animals (alive or dead); evaluation of animals; animal transport; rendering of culled animals; veterinary materials and equipment; pest control; building gassing; container gassing; electrocution equipment; sample transport; veterinary assistance; shower units; catering; road signs and markings. There is a permanent team with seven full-time equivalent in the National Service for the Implementation of Regulations (under the EZ) which is responsible *inter alia* for procurements, drawing up contracts and maintaining these contracts. The FVO team visited the supplier of all veterinary equipment and consumables and noted that:

- there were 38 contracts in place and the duration of each contract was monitored in a dedicated database. Most contracts had been signed for 2 years with 1+1 year extension before a new tendering procedure was started;

- the contracts, which covered all relevant aspects of handling a major outbreak, typically defined availability, quantities and time frames for delivery of the relevant equipment and services;

- each official veterinarian who is on stand-by as a animal disease expert is obliged to keep a pre-packed kit (provided by the contracted supplier) of equipment and consumables for the intial investigation of a notified suspicion. The contractor is responsible for keeping these up-to-date and for replacing expired material;

- the contractor for the veterinary equipment and disposables is obliged under the contract to maintain enough supplies for the first four days of an outbreak and to rapidly re-stock if requested by the EZ. The contract also covered the distribution of vaccines, which would be

supplied by the pharmaceutical companies under separate contracts with the EZ;

- the emergency stock is owned by the Government, which pays for expired stock that cannot be kept fresh by rotating batches between normal sales and emergency supplies. This contractor could supply a local warehouse on farm or in the regional coordination centre if required;

- a supply of clothing and personal protection equipment was guaranteed, which would cover two weeks and included the availablility of 40.000 full-face masks (exchanged every six months).

5.2.10 Vaccination policy and availability of vaccine

It is mandatory to vaccinate all hobby birds which are taken to shows/competitions and commercial poultry against ND. Regulation, implementation, monitoring (through antibody testing) and enforcement of this measure is carried out by the Product Board for Poultry and Eggs, under the supervision of the EZ.

The contingency plan for FMD (2005) outlines the conditions for emergency vaccination in EU legislation, describes the possible scenarios for vaccination against FMD, the pros and cons of vaccination (for trade and disease control), the potential application of vaccination in relation to the different restricted areas and the need for consultation with the European Commission. It is stated that the possibility to vaccinate would certainly be considered should a large-scale outbreak of FMD occur. The Expert Group would be given the task to assess the epidemiological situation and the availability of suitable vaccines and to advise the EZ on if, how and where vaccination should be implemented. An annex to the plan describes the number of cattle per square kilometer per region.

The contingency plan for CSF (2007) includes a chapter on vaccination which makes reference to the relevant EU legislation. The decision making process and the involvement of the Expert group and the Standing Committee on the Food Chain and Animal Health are described and the vaccination principles to be applied for different classes of pigs are included. An annex to the plan describes the number of pigs per square kilometer per region. The new draft contingency plan for CSF discusses the possible use of vaccines which allow differentiating infected from vaccinated animals.

The contingency plan for AI (2007) describes the pros and cons of vaccination (preventive and emergency vaccination) against AI for disease eradication and trade. Any decision about emergency vaccination must be made taking into account all aspects. Vaccination is identified as a possible measure in case an outbreak of low pathogenic AI becomes so widespread that normal control measures are not sufficient. However, any decision to vaccinate must first be approved by the European Commission. An annex to the plan describes the number of poultry per square kilometer.

The audit team noted that:

- neither in the current contingency plans for FMD, AI and CSF, nor in the new drafts for FMD and CSF are there estimates of the vaccine requirements considered necessary in the event of emergency vaccination;

- the current contingency plan for AI (of July 2007) states that it has been possible since 2006 to vaccinate commercial free-range laying hens and hobby poultry against AI. However, the

NVWA operational manual for AI states correctly that preventive vaccination is no longer allowed;

- although estimates for vaccine requirements are not included in the contingency plans, there are contracts in place between EZ and two manufacturing pharmaceutical companies of vaccines against FMD and CSF, respectively. There is also a contract for vaccine against Q-fever. These contracts contain estimates of vaccine requirements and deadlines for delivery. A separate contract covers the distribution of vaccines;

- data on the population densities of the relevant species, which are attached to the contingency plans, are out of date. Such information can be obtained within two hours from the National Service for the Implementation of Regulations.

Conclusions on Contingency Plans

Although neither the contingency plans nor the communication strategy documents have been updated to reflect changes in competent authority structures and no contingency plan has been approved for African Swine Fever the competent authorities are well prepared for handling minor and major outbreaks of epizootic diseases by adapting the existing operational manuals and work instructions. However, there are currently no work instructions dealing with the specific aspects of outbreaks in equines or the particular measures necessary for controlling the spread of diseases transmitted by vectors.

The permanent and centralised functions dealing with all suspicions of notifiable diseases and the trained Front Teams dispatched to handle the initial measures once an outbreak has been confirmed ensure a consistent approach to the initial investigations and effective implementation of important measures to control an outbreak. The 72 hour standstill, which can be declared throughout the Netherlands, would prevent further spread of a disease while giving time for experts to analyse the situation and for appropriate local control measures such as culling of infected and contact farms to be put in place. The maintenance of contracts with suppliers facilitates the effective and rapid implementation of measures. The cost-sharing scheme between the industry and the government for the financing of outbreak eradication helps underpin the importance of swift notification and diagnosis to minimise the impact of outbreaks.

5.3 Preparedness and Awareness

Legal requirements

For all epizootic diseases relevant to this audit, there is a requirement that any occurrence of the disease is notified to the competent authority. With the exception of AHS, notification to the European Commission is mandatory. Surveillance programmes and systems for early detection of disease are required for BT and AI. For some diseases, risk factors (e.g. Areas of high animal density, worst cases scenarios) must be identified within the contingency plan. Specific preparedness and awareness criteria are specified for FMD; for most other relevant diseases, a communications strategy and appropriate communications training are required. The organisation of real-time alert exercises is required for FMD and AI. Alarm drills are required for CSF and ASF.

Annex 2 to this report summarises relevant legislative requirements.

Findings

5.3.1 Epizootic disease risk analysis and alert levels

Each time the NVIC obtains information, through official channels or the media, about an outbreak of a serious disease outside the Netherlands a brief risk assessment is made within two hours. The EZ, the NVWA and other Ministries can request more comprehensive risk assessments from the CVI and/or from the NVWA Office for Risk Assessment and Research Programming.

Each such risk assessment takes into account possible high risk transports of animals or animal products to the Netherlands from the infected country during at least six weeks prior to the confirmation of the outbreak. These risk assessments, which are provided to the EZ, feed into the decision making for preventive measures and provide the basis for stakeholder information.

The NVIC sends weekly risk level lists to Custom services in Schiphol airport identifying countries where outbreaks of AI, ASF, CSF or FMD have been reported in order to enable customs to perform risk-based checks on passengers' luggage arriving from such high risk countries.

The FVO team noted that:

- each contingency plan and operational manual describes measures to be taken during defined alert levels: normal, attention, suspicion, crisis, extraordinary situation and finishing with a return to normal;

- during 2011, the NVIC had produced 11 risk assessments in response to reports of ASF, FMD, ND, PPR, low pathogenic and high pathogenic AI and CSF. In 2012 eight risk assessments were produced for FMD, low pathogenic AI, CSF and ASF;

- the Office for Risk Assessment and Research Programming and the CVI recently carried out a comprehensive risk assessment for the Ministry of Health and the EZ following illegal import of straw from a third country. This report was produced within three weeks;

- each week the NVIC compiles a list of all new notifications of notifiable diseases during the past week, the cumulative number of notifications during the year and the outcomes of these investigations. These lists are distributed to official veterinarians and other interested parties.

5.3.2 Notification requirements (peacetime)

All suspicions of diseases covered in the scope of this audit and of a number of other diseases are notifiable under national legislation. The notifiable diseases are listed in the Ministerial Order on prevention, monitoring and control of contagious animal diseases, zoonoses and TSEs.

Animal owners are obliged to notify their veterinarian and veterinarians are obliged to notify the central notification desk in the NVWA. In serious cases the farmer should contact the notification desk directly and the general public can also notify suspicions to the notification desk. The notification desk transfers the information to NVIC. As described earlier in this report, NVIC is available at all times and an Expert Team would be dispatched immediately to carry out an on-farm investigation and to collect and dispatch appropriate samples.

The FVO team noted that:

- the telephone number to the NVWA notification desk is displayed on the websites of the

NVWA but it is not easy to find. The same number is also available under information about AI and CSF on the Product Board website, but not under FMD. The Animal Health Service provides information to animal owners on their website about diseases and make reference to an obligation to notify the NVWA about SVD, CSF, BT but not for AI and FMD. In addition, the Animal Health Service lists two phone numbers for the notification desk in the NVWA, which are different from the one listed on the NVWA website;

- the notified suspect cases which were investigated by NVIC in 2012 included: AI: 112 cases, three of which were low pathogenic AI; BT: six cases, all negative; CSF: 12 cases, all negative; FMD: four cases, all negative; PPR: one case, negative; AHS: one case, negative; ND: eight cases, two confirmed; SVD: 93 cases, all negative; VS: one, negative; and Schmallenberg virus: 1697 cases, 305 of which were confirmed.

5.3.3 Monitoring and surveillance systems

AI: Monitoring of AI in domestic birds has been delegated by the EZ to the Product Board for Poultry and Eggs. This product board has issued binding legislation for the sampling programme and monitors and enforces its implementation. Sampling in poultry farms is carried out by private veterinarians and samples are analysed in the Animal Health Service laboratory. Any seropositive samples must be submitted to the NRL for confirmation. Confirmed positive results are notified to the NVIC. The programme covers all poultry farms including broiler farms and the sampling strategies in different categories of poultry are risk based. The Product Board is notified by the Animal Health Service of which farms failed to submit the required samples and may issue penalties to the owner.

Passive monitoring for AI in domestic birds is carried out by private veterinarians, often with poultry specialisation, during regular visits. There are binding rules (early warning system) for when a poultry farmer needs to contact the practitioner or in serious cases notify NVWA directly. These rules define threshold values for mortality, decreased egg production and decreased feed or water consumption.

The general public is recommended to submit dead wild birds for AI testing and are obliged to contact NVWA if more than three ducks or swans or more than 20 birds of other susceptible species are found dead. The collection of wild birds is organised through a number of private organisations and the analyses are paid by the government.

ND: The Product Board for Poultry and Eggs is responsible for a programme to check the vaccination against ND in commercial poultry flocks, normally carried out by the owners using vaccine prescribed by the private veterinarian. The owners are responsible for arranging sampling of 30 birds per flock sent to slaughter by the private veterinarian These samples are analysed by the Animal Health Service laboratory. If the samples fail to meet the required target seropositive frequency more than once all vaccinations for one year have to be carried out by the veterinarian.

SVD: All keepers of pigs in the programme for quality classification of pig herds (as described under point 5.3.5.), organised by the Product Board for Livestock and Meat, are obliged to arrange for blood sampling on farm or at slaughter and submission of these samples to private laboratories for analysis of antibodies to SVD. A negative result for SVD (in three samples from the herd) is valid for three months and is a prerequisite for movement of live pigs, consequently samples are taken 3-4 times per year in all commercial herds.

CSF: Official sampling for CSF antibody testing takes place in semen collection centres and prior to export of live pigs. There is also a requirement to analyse blood samples for CSF by polymerase chain reaction (PCR) before herd medication. In addition, tonsils from all pigs submitted for autopsy to the Animal Health Service and veterinary practices are tested for CSF by PCR in the NRL.

Monthly testing for CSF antibodies is included for those holdings allowed to sell live pigs in the voluntary quality schemes organised by the Product Board. The quality system also requires regular clinical inspections by the private veterinary practitioners every one to four weeks.

BT: The last vaccinations against BT were carried out in 2011 and the Netherlands was declared free from BT in February 2012. Surveillance is passive with the exception of the testing of animals intended for export.

Q-fever: Following a major outbreak of Q-fever in humans in 2007 bulk milk samples from all sheep and goat herds are tested every two or four weeks and vaccination of the animals is mandatory.

Wild boar: There are two preserved wild boar populations in the Netherlands, one of which is close to the German border. Sixty to eighty samples from these populations are tested for antibodies to *inter alia* FMD, SVD, and CSF and tissue samples are tested for CSF by PCR. In addition, the Animal Health Service collects and analyses samples from wild boar shot in other parts of the country for antibodies to SVD and submits the samples to the NRL for testing of antibodies to CSF and FMD.

All species: In order to increase the number of monitoring samples taken during passive surveillance there is a possibility for private veterinarians to submit samples for analysis of notifiable diseases without notification, provided that the sample is taken to exclude the unlikely possibility that a notifiable disease is present. However, no animals must leave the holding pending the results of the tests and any (weak) suspicion of a notifiable disease has to be notified to the NVIC which will take over the case and movement restrictions will be formally issued.

The FVO team noted that:

- under the 2011 monitoring programmes samples from 458 wild boar, 5000 tonsil samples from domestic pigs and 70000 serum samples from domestic pigs were analysed for CSF and 125000 serological samples were analysed for antibodies to AI;

- during 2012 samples from 347 wild birds were tested for AI by PCR. Six of these samples were PCR positive for genomes of avian influenza virus, which were neither H5 nor H7. During the same period 65 samples from wild boar had been tested for CSF by PCR;

- within the SVD surveillance programme around 50.000 samples per year are analysed in private laboratories. All seropositive samples must be sent to the NRL for confirmation. If the positive result is confirmed the NVIC is notified and on-farm investigation and sampling are carried out by an expert team. Single reactors in pig herds are not uncommon;

- all samples from pigs suspected of CSF are also tested for ASF by PCR, which was verified on test results from four such suspicions submitted in 2011 and 2012 from the slaughterhouse visited by the FVO team. In 2012 ASF was checked in 87 samples (blood or

tissue) representing 60-70 pigs.

5.3.4 Public awareness activities in "peacetime"

There is comprehensive information about the symptoms and characteristics of AHS, AI, BT, CSF, FMD, SVD, ND and other notifiable animal disease available on the NVWA website, all linked to information about how to report a suspicion of a disease. The Animal Health Service provides information about a large number of diseases to animal owners on its website and the Product Boards also provide some information about diseases.

The NVIC produces weekly lists of notifications of suspect disease outbreaks and the outcome of the investigations. Each list includes the notifications during the past week as well as the cumulative notifications since the beginning of the year. These lists are sent to official veterinarians and a number of stakeholders to raise awareness of disease risks.

Six times per year the NVIC and the NVWA Crisis Coordinator issues an electronic internal newsletter for staff involved in the crisis organization for animal diseases. This newsletter provides information about the crisis organization, incidents and cases of notifiable diseases, training courses and other relevant news.

Following problems with late notification by the veterinary practitioner of a suspect outbreak of CSF (which proved not to be CSF) an article was published in the Dutch Veterinary Magazine. The article described an epidemiological simulation which illustrated how much the disease could have spread before it was notified to the NVIC. Articles in the Dutch Veterinary Magazine and the Journal for General (human) Practitioners have been used to raise the awareness about Q-fever and the zoonotic aspects of this infection. When a case of rabies was detected in an imported dog the NVWA and the Society for general practitioners cooperated in providing information to veterinarians, general practitioners and the public through media and publications.

The FVO team noted:

- there is no information about the symptoms or characteristics of ASF on the NVWA website;
- whilst the comprehensive information on the website of the Animal Health Service for SVD, CSF, BT and AI explains that these diseases are notifiable it is not clear from the text about FMD. In addition, the information for sheep and goat owners does not include information on BT and FMD, the information for horse owners does not include AHS or VS and no information is provided about ASF.

5.3.5 Biosecurity measures in place on animal holdings

Several pieces of national legislation include biosecurity requirements. Under the regulation for the Control, Prevention and Monitoring of Contagious Animal Diseases, Zoonoses and TSEs amongst other requirements are: the requirement for holdings with more than 10 animals to have a cleaning and disinfection facility, the obligation for only cleaned and disinfected vehicles to arrive at a livestock holding and the obligation for transport vehicles to be cleaned and disinfected after unloading animals and before returning to a public road and registration of each cleaning and disinfection event. Animal health and welfare legislation requires material used for housing animals to be capable of withstanding a thorough cleaning and disinfection and that farmers, veterinarians and laboratory staff report suspicions of serious animal diseases.

Vehicles arriving from countries where an outbreak of an animal disease has been confirmed or from any third country require a second cleaning and disinfection. The unloaded vehicles have to be cleaned and disinfected on the spot and must have a second cleaning and disinfection at a licensed cleaning and disinfection facility within 24 hours. Cleaning and disinfection carried out at licensed cleaning and disinfection facilities is recorded in a register at the facility and a transporter log book is signed and stamped to show that the required disinfection has taken place. This allows NVWA inspectors to verify that the required cleaning and disinfection has taken place when carrying out roadside checks.

Product boards and organisations implementing quality systems also have specific rules on biosecurity. For example, IKB insists on biosecurity facilities on pig farms such as changing rooms for staff and essential visitors.

Legislation on the delivery of pigs introduced by the Product Board for Livestock and Meat restricts the movement of pigs between pig farms depending on their health status. Depending on the health status and biosecurity measures all pig holdings are categorised A up to F. The biosecurity classification of pig farms is verified by IKB inspectors. Each category has specified rules concerning the introduction and movement of pigs. In essence, high health status breeding farms can supply breeding stock to a number of holdings, whereas fattening herds can only supply animals direct to slaughter. The high health status farms must meet extra hygienic and veterinary demands and satisfactory results from monitoring for CSF and SVD.

Following the outbreak of FMD in 2001 the competent authorities introduced a ban on the movement off of all cattle, sheep and goats for 21 days after the movement onto a holding. As this requirement included both the animals moved on to the holding and the animals already present it was referred to as the "double 21 day rule". In 2010 the competent authority relaxed this rule so that the restriction on animals moving off currently only applies to those animals that were actually moved onto the holding in the previous 21 days ("single 21 day rule"). The EZ informed the audit team that this change was made as the "double 21 day rule" was difficult to enforce and was one of the reasons that farmers were moving animals without notifying movements.

The FVO team noted:

- the Animal Health Service checks on the validity of pig movements before they take place. Farmers have to apply to the Animal Health Service in order to move pigs directly from one farm to another and if the movement is not allowed under the Product Board rules no movement documents for the move will be issued. NVWA inspectors can also issue penalties if unauthorised movements are detected on farms;

- at the pig slaughterhouse visited a copy of a cleaning and disinfection certificate for one transport vehicle that had transported a CSF-suspect pig was seen. A copy of the corresponding register for the transport vehicle was also available;

- cleaning and disinfection documents were also seen at the assembly centre visited and documents showing that the cleaning and disinfection facilities were inspected on a quarterly basis by the official veterinarian were available. Biosecurity features such as a fully equipped and enclosed cleaning and disinfection area, perimeter fence, disinfectant wheel-wash and changing rooms were in place;

- the pig farm visited produced specific pathogen free pigs for sale and operated to a very high

biosecurity standard. It was of "A" status and supplied breeding gilts to other "A" status farms. Only essential personnel were allowed access to the pigs and only then after having a shower and complete change into farm-provided protective clothing;

- contractors (met by the audit team) that would be responsible for either whole house or container gassing of poultry and electrocution of pigs were fully aware of the biosecurity requirements to prevent spread of infection from infected sites;

- the Front Team that deals with suspect and confirmed outbreaks of epizootic diseases has one team member dedicated to the issue of biosecurity to ensure that all biosecurity measures are followed. Operational manuals also contain detailed instructions on how staff should don protective equipment and effectively disinfect themselves.

5.3.6 Staff training

The NVWA/NVIC is responsible for organising training for all categories of staff potentially involved in outbreaks of animal diseases. Representatives from the EZ and from the NVWA regularly participate as tutors in meetings for private veterinary practitioners, but the competent authorities do not organise training sessions for these categories.

The NVWA provides training programmes targeted to different groups of staff: animal disease experts; Front Teams and Heads of Departments in Regional Coordination Centres. All training is registered in the NVWA personnel system as well as the group affiliation of individual members of staff.

The FVO team noted that:

- the NVWA personnel system allows for real-time checks on the availability of staff who have received a particular training;

- animal disease experts are trained 2-3 times per year, Front Teams are trained once per year (often together with representatives from contractors) and Heads of Departments in Regional Coordination Centres are trained once per year;

- in addition to the theoretical training classes the NVIC organises desk top exercises, field exercises and e-learning modules (five modules since April 2011). At least once per year the issue of personal protection equipment is included;

- each training activity has a specified goal (e.g. learning, practising, experiencing, co-operating, testing) and a target staff group;

- since January 2003, more than 150 training activities (including 14 field exercises) have been registered in the NVWA database specifying date, target group, title of training and number of participants. The training has dealt with different aspects of disease outbreak control measures such as trace-back, cleaning and disinfection, depopulation, vaccination.

5.3.7 Simulation exercises

The contingency plans for FMD and CSF mention that real-time alarm exercises should be carried out within three years of adoption of the contingency plan or within five years of an outbreak of a

serious infectious disease, in particular to test the instructions in place. The contingency plan for AI mentions real-time alarm exercises within the EZ and together with other Ministries but does not specify any frequencies.

The FVO team noted that:

- the contingency plans do not contain procedures for the ”alarm drills” for FMD, CSF and ASF which are required at least twice per year under the Directives;

- none of the training activities on the list provided by the NVWA have included the EZ, NVIC and relevant staff groups and contractors at the same time, which would have been required to conduct an alarm drill for FMD, CSF, ASF, AI or another serious disease;
- the EZ organised one desk exercise on AHS together with the horse sector in 2012 as part of the procedure to update the contingency plan for AHS. The final report for the AHS exercise was commissioned by the EZ from two external consulting bodies. It shows that:

    - the exercise itself was carried out during one day at the EZ with participants from the competent authorities, scientists and representatives from the organised horse industry and other stakeholders. Observers from four other Member States and from the Commission were present;

    - a follow-up meeting was held with the participants to evaluate the outcome of the exercise. Several points for improvement were identified and an action plan was presented: strengthening of the communication between the EZ and the stakeholders; a clear legal basis for damage claims based on an agreement with the stakeholders as to the financial compensations in case of an outbreak and the establishment of an institutionalised key identification and registration system for horses.

    - on an EU-wide level the group proposed improved knowledge building and harmonisation between Member States and expressed a wish for certain amendments to Council Directive 92/35/EEC, e.g. regarding compulsory registration of horses and measures during an outbreak;

- the EZ organised an exercise on food safety vs animal diseases together with the Ministry of Health in 2008 and an exercise on zoonoses together with the Minstry of Health is planned for 2013;

- in 2010 the competent authorities participated in an FMD exercise together with Belgium and Luxembourg and another FMD exercise together with Germany is planned for 2013;

- in addition to the exercises listed above the EZ considers the real outbreaks of Schmallenberg virus, Q-fever, BT, and low-pathogenic AI as recent tests on their preparedness to deal with animal disease outbreaks.

Conclusions on Preparedness and Awareness

National legislation provides an adequate legal basis to ensure that the relevant diseases are notifiable. The active and passive surveillance programmes in place should provide reliable information about the presence or absence of relevant diseases and prompt action is taken when a suspicion is notified. The system of allowing testing for exclusion of a serious disease without

triggering an alert increases the number of samples which can be used by the competent authority to confirm freedom from a particular disease. Staff regularly attend relevant training, including desktop and field exercises. Few of these exercises include all levels of staff which would be necessary to meet the requirements for alarm drills twice per year as required for certain diseases under EU Directives. However, recent outbreaks have tested the system in real-time. High levels of biosecurity are widely practised and enforced by industry-driven biosecurity schemes and NVWA inspectors. There is a high level of awareness among veterinarians and farmers about the damaging effects of animal disease outbreaks.

5.4 LABORATORIES

Legal requirements

Articles 11 and 12 of Regulation (EC) No 882/2004 set out requirements in relation to sampling, analysis and official laboratories, including that laboratories must be accredited to and operate in accordance with ISO 17025. Specific requirements relating to laboratories are laid down in the various EU Directives on epizootic disease control including the designation and functions of National Reference Laboratories, the tests and criteria to be applied, and the provision of adequate diagnostic capabilities and capacity. Diagnostic manuals are provided for FMD, CSF, ASF, SVD and AI (see Annex 2).

Findings

The National Reference Laboratory (NRL) is the Central Veterinary Laboratory (CVI), which is one of the specialised research institutes of Wageningen University. It is located in purpose-built, state-of-the-art facilities with very high biosecurity facilities for handling, and carrying out experimental infections with, highly infectious agents.

The CVI is the only laboratory appointed for confirmatory analyses for notifiable diseases. The Virology Department of the CVI is responsible for all analyses of official samples for the diseases in the scope of this audit. The CVI is accredited to ISO 17025 by the Dutch Accreditation Council and the vast majority of the methods of relevance for this audit are included in the scope of accreditation. Each individual method/matrix combination must be assessed by the accreditation body before being included in the scope of accreditation.

There is a small number of private laboratories authorised for serological testing under the monitoring programmes for AI in poultry, CSF in domestic pigs, SVD in domestic pigs and wild boar and checks on ND vaccination in poultry. Most of these samples are analysed in the Animal Health Service laboratory. The NRL is responsible for supervision of these private laboratories and any positive samples from these (and certain other) monitoring programmes must be submitted to the NRL for confirmation. Other NRL tasks include advice on disease control strategies to the EZ and the NVWA and development and validation of relevant diagnostic techniques. The NRL is consulted during the drafting of relevant parts of the contingency plans and operational manuals.

The FVO team visited the CVI (NRL) and noted that:

- the approved contingency plans make reference to the analytical capacity of the CVL at the time these plans were drafted. However, the agreed initial minimum capacity and rate of up-scaling of the diagnostic capacity are defined in the service level agreement between the EZ and the CVI. The new draft contingency plans for CSF/ASF and FMD make reference to

this agreement;

- the capacity of the CVI has successfully been tested during real outbreaks, most recently of HPAI, BT and Q-fever;

- the service level agreement lays down the requirements for sample submission and reporting and stipulates that the CVI must be available 24 hours a day seven days a week and, when requested by the NVWA, ready to start analyses within two hours (CSF, FMD, AI, SVD), next day or next working day depending on the disease and level of suspicion;

- the CVI has a contingency plan for the laboratory which defines in detail the roles, tasks, responsibilities and actions for all relevant functions in the CVI during four "crisis levels" i) no outbreaks, ii) outbreak in a neighbouring country or a country with which the Netherlands has "risk" contacts, iii) outbreak in the Netherlands and iv) post-outbreak period (evaluation and amendment of plan and procedures);

- the CVI contingency plan is divided into separate segments for the external process and the laboratory process and has a specific supplement for each disease which describes the relevant diagnostic activities, the capacity during the first two weeks of an outbreak, training requirements for staff and check-lists for laboratory space, reagents and equipment;

- the CVI has diagnostic methods in place for all diseases covered in the scope of this audit with the exception of confirmatory methods for VS for which a contract has been signed with an NRL in another Member State;

- for each method included in the scope of accreditation the accreditation certificate makes clear reference to whether the method is an in-house method or if it conforms to or is equal to the methods in the relevant Decisions, where relevant, or in the Manual of Diagnostic Tests and Vaccines for Terrestrial Animals 2011 of the World Organisation of Animal Health;

- the Quality Manual for the CVI includes *inter alia* a standard operation procedure (SOP), revised in November 2012, for validation of microbiological test methods and template for validation files and SOPs. The validation SOP defines the minimum parameters for different categories of methods (in-house methods, methods conforming to international standards and those equal to such standard methods). The IT system automatically ensures that validation reports must be reviewed and re-approved every three years;

- diagnostic methods are developed and validated by (infectious) agent project teams before being submitted for accreditation and transferred to the diagnostic laboratory;

- the methods available for diagnosis of the disease in the scope of this audit are in line with international standards;

- certain rarely used methods remain unaccredited and in the hands of the relevant project team. The available diagnostic methods for AHS, EHD, PPR and RVF have not been included in the scope of accreditation;

- sample reception has an SOP for sample acceptance/rejection criteria and all samples are coded and thus anonymous when handled in the diagnostic laboratory;

- the CVI regularly participates in comparative tests provided by the EU reference laboratories and commercial providers. In those (few) cases where the results had not met expectations corrective actions had been taken and had been recorded on standardised forms within the quality system;

- a department in the CVI which is separated from the diagnostic laboratories organises ring tests for the private testing laboratories in the Netherlands and the CVI diagnostic laboratory also participates in these tests. The terms of participation states that a laboratory which repeatedly fails to pass in these ring tests for a particular method will be reported by the CVI to the NVWA.

Conclusions on Laboratories

Although a small number of diagnostic test methods have not been included in the scope of accreditation the CVI has the capability and the capacity to reliably diagnose the diseases covered in the scope of this audit. The service level contract with the Ministry and the contingency planning in the laboratory should ensure that the laboratory can meet the expectations of the competent authority in an outbreak, as verified by past experiences. The NRL supervision of private laboratories thorough ring tests contributes to the reliability of the monitoring programmes for AI, SVD and CSF.

5.5 Depopulation for Epizootic Disease Control

Legal requirements

Council Regulation (EC) No 1099/2009 lays down rules for the killing of animals, including when this is performed for the purpose of depopulation. In particular, Article 18 of the Regulation requires that the stunning and killing methods planned and the corresponding standard operating procedures for ensuring compliance with the rules laid down in the Regulation shall be included in the contingency plans required under Union law on animal health. It also requires that an action plan shall be established before depopulation and that, when implementing depopulation, the competent authority shall take any appropriate action to safeguard the welfare of the animals in the best available conditions. Derogation may be granted in exceptional circumstances. The competent authority shall provide an annual report on depopulation operations carried out during the previous year to the Commission and the general public.

Findings

5.5.1 Contingency plans / operational manuals / instructions

The EZ indicated that for ensuring compliance with the rules laid down in Council Regulation (EC) No 1099/2009, which entered into force on 1 January 2013, the contingency plans and the corresponding operational manuals and work instructions are being progressively updated to fully integrate the requirements of Article 18 of this Regulation. However the EZ stated that all methods in the current documents comply with the Regulation.

Action plans before depopulation are co-produced by the Front Team and the NVIC. The order of killing different animal groups is decided taking into account the different killing rates and limiting factors that have been worked out at central level. The supervising official veterinarian in the Front Team takes the final decision, in cooperation with NVIC, on the killing method of choice and on the

back-up method.

The FVO team noted that:

- regarding contracts with companies, the Regulation was not specifically mentioned in the contracts, as most of them were signed before 1.1.2013. The EZ explained that when these contracts would be renewed the relevant references to the Regulation would be included;

- the general guidance for depopulation varies between the disease-specific operational manuals. However, this guidance is not fully comprehensive concerning the size and location of outbreaks. Nevertheless, the cooperation currently in place between the NVIC and the Front Teams for the production of an action plan before the depopulation is working well to cover this insufficient guidance;

- the necessary equipment to apply the methods of killing is available mostly via the contracted companies, these companies are in general also responsible of making the equipment operational in the field and for supplying staff to operate the equipment. Contracted companies also have an influence in the decision making, and they are allowed to refuse to perform depopulation if they consider that they cannot meet the animal welfare requirements.

5.5.2 Methods of killing and availability of equipment

The CA has signed contracts with specialised companies that provide personnel and equipment to carry out methods of killing in accordance to Annex I of Council Regulation (EC) No 1099/2009.

The NVWA does not expect to grant derogations for the use of methods of killing which are not included in Council Regulation (EC) No 1099/2009. If necessary, in very exceptional cases, it would be decided on a case by case basis and authorised at Ministerial level.

Regarding lethal injections the preferred method by the NVWA for killing adult cattle is captive bolt plus lethal injection and the NVWA stated that pithing is not in use in the Netherlands. For small ruminants, sedation is strongly recommended before lethal injection. In the case of pregnant animals, drugs that pass the placenta, such as pentobarbital, would be the first choice.

Concerning electrical methods, electric tongs are mostly available from the contractor that also provides four portable electrocution units for pigs. These electrocution units' method of killing is referred to as head-to-body electrical stunning as described in method 2, table 2, Chapter I of Annex I to Council Regulation (EC) No 1099/2009, which result in instantaneous death. However, a scientific study of a similar unit from 1986 demonstrated that the body was exposed to a current that generated at the same time epileptic form of the EEG and cardiac fibrillation or arrest. However, it was also reported that a small number of pigs received electrical shocks before stunning. The reason for this was that the first part of these animals in contact with the electrodes was not the head due to several reasons such as, the animals' position and closeness, live weight, width of the tunnel and position and contact surface area of the electrodes.

The FVO team visited the contractor for the electrocution unit, where a meeting and demonstration without live animals was organised, and noted that:

- neither the contract nor the operational manual made reference to animal welfare aspects

such as introduction of the animal with the head first in the electrocution tunnel, minimum pig weight, avoiding the entry of more than one pig at the time in the tunnel, contingency plan in case of failure. There were no working instructions for the operators in particular for the one at the entrance of the tunnel and for staff from another contractor, which would be responsible for bringing pigs to the tunnel entrance.

- the NVWA took immediate action and before the final meeting of this audit the working instruction was amended to indicate that care should be taken to ensure that the head of the animal would contact the electrodes first.

With respect to killing methods for birds, carbon dioxide gas methods are the first choice. One contractor provided personnel and equipment for whole-house gassing and the other one for gassing in containers. The FVO team met separately with both contractors and noted that:

- both contractors had manuals of operations, working instructions, calibration procedures and training of staff, as required by Council Regulation (EC) No 1099/2009;

- both gassing systems have been improved in the recent years with new methods and techniques in order to effectively achieve the required CO2 concentrations. In order to solve earlier problems with low gas temperatures and irregular distribution of gas, the systems now include solutions such as constant temperature and gas monitoring, computer centralised controls and multiple gas injection points;

- welfare parameters that the specialised companies have to meet are included in the contracts, 20% CO2 within 10 minutes, more than 40% within 30 minutes and a temperature gradient less than 10 C. Both methods can provide CO2 in two phases, which makes the methods suitable for killing of all poultry including ducks and geese, as indicated in method 2 of table 3 of Chapter I to the Annex I to Regulation (EC) No 1099/2009;

- CO2 at high concentration, more than 40%, is only provided by the company gassing in containers, ducks and geese are excluded, as required by the Regulation;

- the animal welfare implications of movements restrictions due to protection and surveillance zones, such as overstocking or restrictions in the routine movement of animals for management purposes, are mostly dealt with through the advice from the EZ that farmers should have emergency housing facilities to cope with the six first weeks of an outbreak. In the pig farm visited it would be possible to achieve this, partially due to its very high quality pig production, with a surplus of farrowing crates and high space allowance per animal.

5.5.3 Reporting /supervision /training / scientific network

The audit team noted that:

- the CA has produced a form to be filled in after each depopulation operation that include the sections required in point 4 of the Article 18 or the Council Regulation (EC) No 1099/2009, such as number and species of animals, killing method used, difficulties encountered and solutions found to alleviate suffering. It was noted that the required information can already be collected from the previous reports produced after depopulation and from a new check list for animal welfare to be completed after depopulation;

- animal welfare during depopulation is supervised firstly by an official veterinarian of the Front Team, who can always consult the animal welfare experts at central level. In addition, during large depopulation operations, such as the recent Q-fever outbreak, an animal welfare expert team would assess in the field the impact on animal welfare;

- Front Teams are regularly trained by the NVWA training system that includes animal welfare aspects. The NVWA stated that the depopulation requirements laid down in Council Regulation (EC) No 1099/2009 would be included in the next AI training exercise in February 2013;

- training of animal handlers, such as poultry catchers and pig handlers, is mostly provided through courses organised by stakeholders organisations and vocational schools. Slaughterhouse personnel that carry out depopulation operations must hold a certificate of competence as required by Article 21 of Council Regulation (EC) No 1099/2009. Contracted companies are responsible of having appropriate trained staff.

- the CA indicated that the single contact point responsible for sharing technical and scientific information and best practices, as required by Article 20 of Council Regulation (EC) No 1099/2009, is the University of Wageningen.

Conclusions on depopulation for epizootic disease control

Methods of killing are in compliance with Council Regulation (EC) No 1099/2009 and procedures are in place for the granting of derogation by the Ministry in very exceptional cases. To fully integrate the requirements of Article 18 of Council Regulation (EC) No 1099/2009 the competent authorities are progressively updating the contingency plans, operational manuals and instructions as well as the contracts with specialised companies. In general relevant animal welfare requirements are included in the contracts and the operational procedures of the specialised companies. However, further amendments are needed to contract specifications and work instructions for official and private staff to ensure that animal welfare requirements are met for the electrocution unit.

Although the work instruction provided is not fully comprehensive concerning size and location of outbreaks, the cooperation currently in place between the NVIC, the Front Teams and the contracted companies is sufficient for the production of an action plan before depopulation.

The EZ has sought the cooperation of the industry to reduce the animal welfare implications of movement restrictions in protection and surveillance zones. The EZ and NVWA have already put in place a system for recording and reporting after depopulation, supervision, and training. A contact point for sharing technical and scientific information with other Member States has been nominated.

5.6 Disposal of Carcasses

Legal requirements

Commission Regulation (EC) No 1069/2009 lays down health for animal by-products (ABP) and derived products, in order to prevent and minimise risks to public and animal health. In particular, Article 9 (f)(i) specifies that animals and parts of animals killed for disease control purposes, shall be considered as Category 2 animal by-products and therefore subject to the disposal methods specified in the Regulation.

In relation to FMD controls, Directive 2003/85/EC (Article 72 (1), (4) and (5) and Annex XVII Points 13 and 14) requires that the means of disposal of carcasses and animal waste does not cause environmental damage and that appropriate sites and undertakings for the treatment or disposal of animal carcasses and animal waste be identified in the contingency plan.

Findings

In the event of an epizootic disease outbreak disposal of carcasses will take place in the Category 1 animal by-product (ABP) processing plant approved under Regulation (EC) No 1069/2009. In 1999 following the severe outbreak of CSF in 1997 the ABP processing plant concerned produced a plan for how to deal with the disposal of large numbers of carcases during an animal health or public health emergency. Currently this plan is revised on an annual basis and the 2013 version was available to the audit team.

The EZ indicated that burial of carcases or disposal by burning in pyres would not be considered as a disposal method.

The audit team noted that:

- by increasing the working hours of the processing plant it is estimated that a total of 10,700 tonnes of carcases could be processed in a week;

- carcasses would be transported using leak-proof vehicles provided by the processing plant. In the event of a serious animal disease outbreak sufficient transport would be available to the processing plant to transport approximately 7000 tonnes of carcases per day. Transport of carcases would not limit the rate of disposal of carcases;

- in the event of the maximum capacity of the processing being insufficient to cope with the numbers of carcases to be disposed of there are further contingencies in place. These include: diversion of ABP from carcases not affected by the outbreak to other countries prepared to accept such material for processing and storage of carcases in cold stores until processing capacity is available. Some material could also be processed directly in incineration plants;

- plans are in place to protect workers from AI and other zoonoses. These include: use of overalls, gloves, goggles and nose and mouth masks, vaccination against influenza and the use of antiviral medicines if necessary;

- three levels of processing plant hygiene operation have been identified. These are normal operation in the absence of a disease outbreak, alert or suspicion when there is a higher risk of animal disease outbreaks and the outbreak situation when maximum hygiene rules are in place and 24 hour supervision of the disposal operation is carried out by NVWA staff. Measures would be put in place, such as the use of the most effective disinfectant for the disease in question and the destruction of materials such as hides that are normally harvested.

Conclusions on disposal of carcasses

There should be sufficient ABP processing capacity in Netherlands to dispose of animals that would have to be killed to control epizootic disease outbreaks in all but the most severe epizootic crises.

The animals would be processed in line with the requirements of Regulation (EC) No 1069/2009. The requirements of Article 72 (1),(4) and (5) and Annex XVII (13) and (14) of Directive 2003/85/EC are met.

6 Overall Conclusions

Competent authorities have been designated and sufficient legal powers are available to develop contingency plans and to control epizootic outbreaks. Formal agreements in place between the animal health and public health authorities form a good basis for effective cooperation and coordination in dealing with outbreaks of zoonotic diseases.

The competent authorities are well prepared for handling minor and major outbreaks of epizootic diseases. There is a permanent structure for dealing with suspect outbreaks, specially trained Front Teams handling all confirmed outbreaks and contracts are maintained for equipment and services. However, weaknesses were observed with regard to a lack of documented procedures for African swine fever, outbreaks in equines and the particular measures necessary for controlling the spread of diseases transmitted by vectors. A cost-sharing scheme between the industry and the government for the financing of outbreak eradication helps underpin the importance of swift notification and diagnosis to minimise the impact of outbreaks.

The relevant diseases are notifiable under national legislation and the active and passive surveillance programmes should provide reliable information about the presence or absence of relevant diseases. Prompt action is taken when a suspicion is notified. The national reference laboratory has the capability and capacity to reliably support the competent authorities in detecting and controlling epizootic diseases. Staff regularly attend relevant training, including desktop and field exercises. Although few of these exercises include all levels of staff which would be necessary to meet the requirements for alarm drills twice per year as required for certain diseases under EU Directives the system has been tested during recent outbreaks. High levels of biosecurity are widely practised and enforced by industry-driven biosecurity schemes and NVWA inspectors.

Work is in progress to update contingency plans, instructions and contracts with specialised companies to include legal references to Article 18 of Council Regulation (EC) No 1099/2009. The CA has already put in place a system for recording and reporting after depopulation, supervision, and training. Current arrangements allow the production of an action plan before depopulation and the available methods of killing are in compliance with Council Regulation (EC) No 1099/2009. However, the electrocution system for pigs and the corresponding contract and instructions need further refinement to ensure that it meets the requirements in EU legislation.

There should be sufficient ABP processing capacity in Netherlands to dispose of animals that would have to be killed to control epizootic disease outbreaks in all but the most severe epizootic crises. The animals would be processed in line with the requirements of Regulation (EC) No 1069/2009. The requirements of Article 72 (1),(4) and (5) and Annex XVII (13) and (14) of Directive 2003/85/EC are met.

7 Closing Meeting

A closing meeting was held on 6 February with representatives of the EZ and NVWA. At this meeting, the main findings and preliminary conclusions of the audit were presented by the audit team. During the meeting the representatives of the competent authorities did not indicate any major

disagreement with the findings and preliminary conclusions.

8 RECOMMENDATIONS

The competent authorities are invited to provide details of the actions taken and planned, including deadlines for their completion ('action plan'), within one month after receipt of the report, aimed at addressing the recommendations set out below

N°.	Recommendation
1.	The competent authority should ensure that there are contingency plans and staff instructions in place to meet the requirements in EU legislation, in particular Annex III and VI(e) to Council Directive 2002/60/EC (ASF), Annex III(6) to Council Directive 2000/75/EC (BT), and Annex IV(6) to Council Directive 92/35/EEC (AHS).
2.	The competent authority should ensure that alarm drills and real time exercises are organised as required under: Article 73 of Directive 2003/85/EC and Annex XVII(11.2) and Annex XVII (11.2.4) of this Directive (FMD); Annex VII(g)(ii) to Directive 2001/89/EC (CSF); and Annex VI(f)(ii) to Council Directive 2002/60/EC (ASF).
3.	The competent authority should ensure that the relevant parts of contingency plans, operational manuals, work instructions and contracts with specialised companies are updated to include legal references to Article 18 of Regulation (EC) No 1099/2009.
4.	The competent authority should make sure that the operation and construction of the electrocution system for pigs and the instructions for personnel operating and supervising the system are adequate to ensure that the key parameters of the method are met as detailed for method no. 2, Table 2, Chapter I of Annex I to Regulation (EC) No 1099/2009.

The competent authority's response to the recommendations can be found at:

http://ec.europa.eu/food/fvo/rep_details_en.cfm?rep_inspection_ref=2013-6775

Annex 1 - Legal References

Legal Reference	Official Journal	Title
Dir. 92/35/EEC	OJ L 157, 10.6.1992, p. 19-27	Council Directive 92/35/EEC of 29 April 1992 laying down control rules and measures to combat African horse sickness
Dir. 92/66/EEC	OJ L 260, 5.9.1992, p. 1-20	Council Directive 92/66/EEC of 14 July 1992 introducing Community measures for the control of Newcastle disease
Dir. 92/119/EEC	OJ L 62, 15.3.1993, p. 69-85	Council Directive 92/119/EEC of 17 December 1992 introducing general Community measures for the control of certain animal diseases and specific measures relating to swine vesicular disease
Dir. 2000/75/EC	OJ L 327, 22.12.2000, p. 74-83	Council Directive 2000/75/EC of 20 November 2000 laying down specific provisions for the control and eradication of bluetongue
Dir. 2001/89/EC	OJ L 316, 1.12.2001, p. 5-35	Council Directive 2001/89/EC of 23 October 2001 on Community measures for the control of classical swine fever
Dir. 2002/60/EC	OJ L 192, 20.7.2002, p. 27-46	Council Directive 2002/60/EC of 27 June 2002 laying down specific provisions for the control of African swine fever and amending Directive 92/119/EEC as regards Teschen disease and African swine fever
Dir. 2003/85/EC	OJ L 306, 22.11.2003, p. 1-87	Council Directive 2003/85/EC of 29 September 2003 on Community measures for the control of foot-and-mouth disease repealing Directive 85/511/EEC and Decisions 89/531/EEC and 91/665/EEC and amending Directive 92/46/EEC
Dir. 2005/94/EC	OJ L 10, 14.1.2006, p. 16-65	Council Directive 2005/94/EC of 20 December 2005 on Community measures for the control of avian influenza and repealing Directive 92/40/EEC

Legal Reference	Official Journal	Title
Reg. 882/2004	OJ L 165, 30.4.2004, p. 1, Corrected and re-published in OJ L 191, 28.5.2004, p. 1	Regulation (EC) No 882/2004 of the European Parliament and of the Council of 29 April 2004 on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules
Reg. 1099/2009	OJ L 303, 18.11.2009, p. 1-30	Council Regulation (EC) No 1099/2009 of 24 September 2009 on the protection of animals at the time of killing
Reg. 1760/2000	OJ L 204, 11.8.2000, p. 1-10	Regulation (EC) No 1760/2000 of the European Parliament and of the Council of 17 July 2000 establishing a system for the identification and registration of bovine animals and regarding the labelling of beef and beef products and repealing Council Regulation (EC) No 820/97
Reg. 21/2004	OJ L 5, 9.1.2004, p. 8-17	Council Regulation (EC) No 21/2004 of 17 December 2003 establishing a system for the identification and registration of ovine and caprine animals and amending Regulation (EC) No 1782/2003 and Directives 92/102/EEC and 64/432/EEC
Dir. 2008/71/EC	OJ L 213, 8.8.2008, p. 31-36	Council Directive 2008/71/EC of 15 July 2008 on the identification and registration of pigs (Codified version)
Reg. 1069/2009	OJ L 300, 14.11.2009, p. 1-33	Regulation (EC) No 1069/2009 of the European Parliament and of the Council of 21 October 2009 laying down health rules as regards animal by-products and derived products not intended for human consumption and repealing Regulation (EC) No 1774/2002 (Animal by-products Regulation)