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FINAL REPORT OF AN AUDIT

CARRIED OUT IN

LITHUANIA

FROM 14 TO 16 APRIL 2014

IN ORDER TO EVALUATE THE IMPLEMENTATION OF ANIMAL HEALTH CONTROLS IN  
RELATION TO AFRICAN SWINE FEVER

*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 an audit carried out by the Food and Veterinary Office (FVO) in Lithuania from 14 to 16 April 2014.

The objective of the audit was to evaluate whether relevant legal requirements and standards applicable to African swine fever (ASF) are implemented effectively to achieve the objectives of:

- Early detection of ASF by passive and active surveillance;
- Preventing the disease from spreading into the domestic pig population (biosecurity measures);
- Preventing the disease from spreading outside the infected area via live domestic pigs, meat or meat products from feral pigs; and
- Providing sufficient guarantees that live domestic pigs and meat or meat products from feral pigs from the infected area are not released for intra-Union trade.

Overall, the report concludes that:

The Competent Authority has taken effective measures to prevent further spread of the ASF outbreak detected in wild boars in January 2014. These measures included adequate demarcation of the infected area around the out-break, increasing bio-security measures on pig holdings, increasing passive and active surveillance activities and introducing movement controls/restrictions on live animals and products of porcine origin. The setting up of a risk area around the infected area and a buffer zone along the Belarusian border further enhance the control measures and go beyond the legal requirements.

Results from surveillance activities indicate that the outbreak in January was detected early enough i.e. before further spread of the disease occurred and that newly introduced protective measures were effective in containing the outbreak. The results also indicate that the probability of ASF virus still circulating in the wild boar population (or domestic pig population) is very low. A risk of a new outbreak(s) still exists but the current level of surveillance and preventive measures applied can be considered effective in ensuring early detection of ASF and to prevent further spread of the disease.

As the risk of ASF re-emerging in this area is still high, control measures need to be maintained at a high level – and continuously improved when potential weaknesses are detected. To that end, this report includes six recommendations to the Lithuanian Competent Authorities; one recommendation to rectify a non-compliance and another five recommendations to further improve the control system.

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## ABBREVIATIONS AND DEFINITIONS USED IN THIS REPORT

<b>Abbreviation</b>	<b>Explanation</b>
ASF	African Swine Fever
ASF guideline	Guidelines on surveillance and control of African swine fever in feral pigs and preventive measures for pig holdings (ref: SANCO/7138/2013).
CSF	Classical Swine Fever
CVET	Community Veterinary Emergency Team
Decision	Commission Implementing Decision 2014/178/EU
Diagnostic Manual	Annex to Commission Decision of 26 May 2003 approving an African swine fever diagnostic manual.
Directive	Council Directive 2002/60/EC
EFSA	European Food Safety Authority
ERD	Emergency Response Department
EU	European Union
ELISA	Enzyme linked immuno-sorbent assay
FVO	Food and Veterinary Office
rt-PCR	Reverse transcription polymerase chain reaction
SFVS	State Food and Veterinary Service

## 1 INTRODUCTION

This audit took place in Lithuania from 14 to 16 April 2014. The audit team comprised two auditors from the Food and Veterinary Office (FVO).

The audit was undertaken in response to a recent outbreak of African Swine Fever (ASF) in Lithuania in January 2014 (see background) to evaluate the effectiveness of early detection of and preventive measures against the disease.

The audit team was accompanied throughout the audit by representatives of the Lithuanian State Food and Veterinary Service (SFVS) which is the competent authority within the scope of this audit.

## 2 OBJECTIVES

The objective of the audit was to evaluate whether relevant legal requirements and standards applicable to African swine fever have been implemented effectively to achieve the objectives of:

- Early detection of ASF by passive and active surveillance;
- Preventing the disease from spreading into domestic pig population (bio-security measures);
- Preventing the disease from spreading outside the infected area via live domestic pigs, meat or meat products from feral pigs; and
- Providing sufficient guarantees that live domestic pigs and meat or meat products from feral pigs from the infected area are not released for intra-Union trade.

### Scope:

- Passive and active surveillance in the infected area (including awareness campaigns);
- Census of pigs on holdings in the infected area;
- Bio-security on pig holdings; and
- Controls on meat and meat products of feral pig origin;

Preparedness for outbreaks was excluded from the scope of this audit for the following reasons:

- the Competent Authority has managed to deal successfully with two outbreaks of Classical Swine Fever; one in 2009 and another one in 2011;
- actions taken during recent outbreaks of classical swine fever and contingency planning were assessed during an audit in 2012 (report reference: DG(SANCO) 2012-6386-MR-FINAL). This report is available at: [http://ec.europa.eu/food/fvo/rep\\_details\\_en.cfm?rep\\_id=2909](http://ec.europa.eu/food/fvo/rep_details_en.cfm?rep_id=2909);
- The Competent Authority has addressed satisfactorily all the recommendations of that audit in their action plan; and
- simulation exercises have been organised recently to increase preparedness for a rapid response to potential disease outbreaks.

Similarly, the implementation of border controls against ASF were excluded from the scope of this audit because that topic was covered by another recent FVO audit (report reference: DG(SANCO)

2013-7116 – MR FINAL). The report is available at:

[http://ec.europa.eu/food/fvo/rep\\_details\\_en.cfm?rep\\_id=3205](http://ec.europa.eu/food/fvo/rep_details_en.cfm?rep_id=3205)

In pursuit of these objectives the following sites were visited:

Central Competent Authority	2	Opening and closing meeting with SFVS
District Veterinary Authorities	2	Two districts inside the infected area
Local (private) veterinarian	1	Veterinarian in charge of census and controls on farms
Farms	2	One large commercial pig holding (>200 pigs) and one backyard holding (<10 pigs)

### **3 LEGAL BASIS**

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

- Article 45 of Regulation (EC) No 882/2004 of the European Parliament and of the Council on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules, and
- Article 20 of Council Directive 2002/60/EC 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.

Other relevant legislation for this audit is mentioned in the Annex to this report.

### **4 BACKGROUND**

Since the declaration of outbreaks of ASF in Georgia in 2007, the disease has expanded to several neighbouring countries: it was identified in feral and domestic pigs in Armenia and Russia the same year in Ukraine in 2012, and in Belarus in 2013. After the disease was detected in Belarus, Lithuania established a buffer zone along the border with Belarus and increased surveillance throughout the country in order to detect the disease as early as possible and to allow rapid response to possible outbreaks.

In January 2014 Lithuania informed the Commission of the confirmation of the disease in two wild boars along its border with Belarus. Six districts around these cases were declared as infected area and surveillance activities and bio-security measures were upgraded in order to increase the ability to detect any further cases and to prevent the disease from spreading into the domestic pig population.

Two Community Veterinary Emergency Team (CVET) visits were carried out between the outbreak and this audit: one on 27-31 January with experts from EU Member States, Commission, RU, BY and OIE and another one on 12-14 March with experts from the Commission, EU Member States and OIE. The purpose of these visits where to provide assistance to the Lithuanian authorities in

developing:

- the most suitable control and eradication measures; and
- a surveillance and eradication plan;

The expert group concluded after the last visit in March that all the provisions in Article 15 of Directive 2002/60/EC were implemented.

Three working hypothesis on the emergence of ASF in Lithuania have been evaluated by both CVET and the Lithuanian CA:

- Movement of infected wild boar from other infected areas (most likely Belarus) into the forest area of Salcininkai, Alytus and Varena districts;
- Infection of wild boar by uptake of infected material available in the area (e.g. Infected material disposed in the forest); and
- Infection of wild boars from domestic pigs, particularly from back-yard holdings.

None of these hypothesis could be either proven or excluded. With the benefit of hind-sight, the third hypothesis is currently considered to be the most unlikely one. At the time of the audit, opinions were divided in favour of either the first or the second hypothesis. Which ever the case might be, CA efforts have been focused on (a) verifying whether the infection has been established in the wild boar population and (b) early detection of potentially remaining infected animals.

The structure and organisation of the Lithuanian State Food and Veterinary Service (SFVS) are described on the following web-sites:

<http://vmvt.lt/en/about.sfvs/structure/> and

[http://ec.europa.eu/food/fvo/controlsystems\\_en.cfm?co\\_id=LT](http://ec.europa.eu/food/fvo/controlsystems_en.cfm?co_id=LT)

## **5 FINDINGS AND CONCLUSIONS**

### *Main legal requirements*

Council Directive 2002/60/EC and the “Guidelines on surveillance and control of African swine fever in feral pigs and preventive measures for pig holdings – ref: SANCO/7138/2013” (hereafter: ASF guidelines) provide requirements on the demarcation of infected area, surveillance, preventive measures and awareness campaigns.

Annex to Commission Decision 2003/422/EC (Diagnostic Manual) lays down the procedures, sampling methods and criteria for evaluation of laboratory test results. Section H of the manual provides for serological monitoring and sampling procedures in areas where ASF is suspected to occur or has been confirmed in feral pigs.

Commission Implementing Decision 2014/178/EU, of 27 March 2014, defines the protective measures to prevent further spread of ASF by way of introducing restrictions on trade in live pigs, porcine semen, ova and embryo, pig meat, pig meat preparations, pig meat products and any other products containing pig meat, as well as consignments of animal by-products from porcine animals from certain areas listed in the Annex to that Decision.

## 5.1 GEOGRAPHICAL ZONES FOR DISEASE CONTROL

Lithuania is divided into four areas with different levels of controls and surveillance, depending on the distance from the Belarusian border and/or from the infected wild boars found in January 2014: buffer zone, infected zone, risk area and the rest of Lithuania. The rationale for this division is to provide a sufficient level of surveillance and other control measures throughout the country while deploying most of the resources into the areas of highest risk.

### 5.1.1 Buffer zone

- Lithuania started to implement control measures to minimize the ASF risk in domestic pigs already in 2013, after Belarus notified its first outbreak. A buffer zone – a minimum of 10 km wide zone – along the border with Belarus was established (Figure 1 in Annex 2).
- Although the main focus since January 2014 has shifted to the infected and risk areas, the measures taken in the buffer zone between June 2013 and January 2014 are still in effect. These measures were: (a) significant decrease in back-yard pig population; (b) strict bio-security rules introduced for back-yard holdings and (c) compensations paid for the back-yard holdings not to keep pigs for the next year.

### 5.1.2 Infected area

- An infected area was established as required by Article 15 of Council Directive 2002/60/EC (Figure 2 in Annex 2) after the two infected wild boars were found in January 2014. The administrative areas included in this area are listed in Part II of the Annex to Commission Decision 2014/178/EU and are shown below in Figure 2. The area is about 35-65 km wide, about 140 km long and has a surface area of about 5610 km<sup>2</sup>.

### 5.1.3 Risk area

- The risk area is about a 25-45 km wide zone around the infected area, has a surface area of about 5400 km<sup>2</sup> and the administrative units included in this area are listed in Part I of Annex to Commission Decision 2014/178/EU (Figure 2 in Annex 2).

The infected area has been demarcated as required by Article 16.3(b) of the Directive and in particular, taking into account the criteria listed in that Article, the ASF Guideline and point 2 of section H in the Diagnostic Manual.

Road A16, which connects Vilnius and Marijampole, is fenced to stop wild animal movements and provides an artificial obstacle to wild boar. Rivers Nemunas and Neris provide another barrier separating northern parts of Lithuania from the infected and risk areas.

Due to the landscape in this part of Lithuania i.e. lack of mountains and major water features which would completely block movements of wild boar, the infected area has been defined large enough to comply with the recommendation of section H.2 of the Diagnostic Manual. The recommendation is to provide sampling areas of at least 200 km<sup>2</sup> where a population of about 400 to 1000 feral pigs may usually live. The sampling areas (12) within the infected and risk areas together comprise a total of 11.000 km<sup>2</sup> with an estimated total number of 8.000 wild boars.

#### 5.1.4 Target populations for surveillance

The holdings in infected and risk areas are of typical backyard type belonging to a remote region with a low animal density not involved in industrialized animal production. Pigs are mostly kept for own consumption or for the local market. The wild boar population in the infected area is estimated to be about 3 000 animals and about 5 000 animals in the risk area, which leads to a density of less than two animals per square kilometre of the forest area. The proportion of forest within the areas is relatively high (approximately 45% of the territories), representing an ideal bio-tope for wild boar.

- The estimated wild boar population in Lithuania is 65,000, of which 3000 are in the infected area and 5000 in the risk area.
- Estimates on wild boar populations are based on counting at feeding sites.
- After ASF was confirmed in Belarus in June 2013, authorised veterinarians were ordered to carry out a census of all pig holdings in the buffer zone.
- On 24 January 2014, authorised veterinarians received another order to visit all pig farms again, verify the presence of pigs. According to the records examined by the audit team, these visits had been finalised by the time of the audit.
- Domestic pig population according to official statistics in April 2014 was as follows:

herd size	Infected area		At risk area		Rest of the country		Total in the country	
	holdings	pigs	holdings	pigs	holdings	pigs	holdings	pigs
<10 pigs	1,538	5,247	783	3,237	6,060	21,939	8,381	30,423
≥10 pigs	52	13,971	38	25,008	585	538,241	675	577,220
Total	1,590	19,218	821	28,245	6,645	560,180	9,056	607,643

- Since first half of 2013 two main factors have been affecting the evolution of these statistics, particularly within the infected area:
  - the number of registered back-yard holdings/keepers has been increasing as a result of awareness campaigns and enforcement of the notification requirements and at the same time:
  - a large number of back-yard holdings have stopped keeping pigs due to either a failure to comply with bio-security measures or having received a government grant to stay pig-free for one or two years.
- After the ASF out-break in Belarus pig keepers in the buffer zone were instructed to enforce strict bio-security measures and compensation was offered to them for slaughtering their pigs and for signing an agreement not to keep pigs for at least one year. By these measures 2406 pigs have been slaughtered for own consumption and 798 pig keepers were compensated within the buffer zone during 2013.
- Recently, the numbers of on-farm visits have reduced, as all pig holdings in the buffer zone

which were not able to comply with strict bio-security rules have been obliged to cull their animals. The deadline for this cull was 15 April 2014 (see also section 5.3.2).

- Back-yard holdings in the infected zone have been encouraged to slaughter their pigs for own consumption and keep their premises free of pigs for the following two years – a compensation is offered for the keepers to do that.
- This has resulted in a reduction of holdings from 3373 (2<sup>nd</sup> half of 2013) to 2881 and a reduction in number of animals from 27448 to 19359, respectively. As of 14 April 2014 this measure had resulted in some 720 farms with 2400 pigs receiving compensations in total of 0.5 million litas.
- The national number of pig holdings in the official database has almost doubled since the first half of 2013, indicating effectiveness of general awareness programmes together with official controls in encouraging keepers to declare pigs – and allowing controls to be carried out on all premises apart from a few illegal holdings, which are difficult to detect.
- The total number of registered pig keepers in the infected area – including keepers declaring to have no pigs – has increased from 748 up to 4195 during the past year. At the time of the audit the number of keepers declaring no pigs (1314) was almost double compared to the total number of keepers (748) one year earlier. These increases are not considered to reflect an increase in back-yard holdings but rather, increased knowledge about the keepers as a result of the census.
- Incomplete movement notifications – in particular notifications where a matching out-going or in-coming notification does not exist – are flagged in the database. This provides an opportunity to find those few who do not declare pigs but this possibility has not yet been used by the SFVS to target on-farm inspections.

## Conclusions

The zoning of Lithuania provides a good basis for the CA to allocate more resources in areas with higher risk while maintaining a reasonable level of surveillance and bio-security measures in areas with lower risk. The CA have up-to-date information on holdings in the infected area, which provides confidence that control and surveillance activities cover the risk populations sufficiently. Pig data-base has not been used to its full extent for targeting controls – leaving a possibility for some keepers to escape controls while they could be easily detected.

## **5.2 EARLY DETECTION**

In order to prevent ASF from spreading further from the infected area – either from residual or newly infected animals – early detection of infected animals is crucial in safeguarding the non-infected areas from becoming infected. To that end a) all key players e.g. veterinarians, farmers, hunters, should have the necessary knowledge and skills to deal with ASF; b) appropriate passive surveillance activities should be organised to ensure that clinically ill animals do not remain undetected and (c) active surveillance should be able to demonstrate that ASF virus is not circulating in either wild boar or domestic pig populations.

### *5.2.1 Training and awareness programmes*

The SFVS has taken appropriate measures in compliance with the ASF guideline, in order to ensure that the objectives of disease notification requirements in Article 3 of Council Directive 2002/60/EC are met:

- SFVS provides ASF-specific information on its web-site, including e.g. pictures of clinical cases, and sampling instructions for hunters:  
<http://vmvt.lt/lt/gyvunu.sveikata/gyvunu.ligos/informacija.apie.afrikini.kiauliu.mara/>
- On Sunday 13 April, the web-site had 727 hits with 597 unique visitors and 2296 actions were recorded. During weekdays, the number of visits increases to 4000-5000 per day and the other indicators are consequently multiplied by six to eight.
- All farmers, hunters, authorised and official veterinarians met by the audit team were well aware of the web-site and its contents.
- SFVS organised three training sessions in 2013-2014 for hunters and authorised veterinarians, to increase knowledge and awareness on ASF related issues.
- During the same time-period SFVS organised three simulation exercises on ASF – all 51 territorial units participated in at least one of these training sessions. These exercises were specifically focusing on clinical examination i.e. recognition of suspect ASF cases, actions to be taken and communications between key players.
- Two training sessions are planned for 2014 (60 veterinarians each) on contingency plans, specific emphasis on African Swine Fever.
- At the time of this audit, 2202 out of 2673 registered hunters (in the infected area) were provided with training on ASF.

### *Conclusions*

All farmers, hunters, authorised and official veterinarians demonstrated good level of knowledge in relation to the impact of ASF, clinical signs, actions to be taken and precautionary measures commensurate with their role in the disease control system. The training and awareness programmes of SFVS have been effective in increasing awareness of the key players.

### *5.2.2 Surveillance*

Surveillance comprises two main elements: passive and active surveillance.

The purpose of passive surveillance is to detect and follow up any clinical signs or mortalities which might indicate the presence of ASF. This requires a good level of awareness amongst key

players (as with active surveillance) and continuous efforts in examining suspect animals and animals which have died on farm.

Active surveillance focuses on detecting antibodies in clinically healthy animals, which could indicate (undetected) circulation of the virus in the animal population – particularly in wild boars but also in domestic pigs. It is also designed to detect domestic pigs with suspicious clinical signs which may have remained undetected, and indicate the presence of ASF. As passive surveillance remains the most efficient tool for early detection, active surveillance serves the purposes of:

- providing a second layer of assurances, should passive surveillance fail; and
- collecting evidence supporting claims of the absence of virus circulation.

Under the most likely hypothesis on the emergence of ASF in Lithuania (see background), surveillance in the wild boar population forms the first layer of early detection of re-emerging ASF infection. Should that detection fail, surveillance in back-yard holdings provides for the second layer of early detection. If both these layers fail and ASF finds its way to larger commercial or non-commercial holdings, surveillance in these larger holdings needs to detect the disease as a matter of urgency to prevent further spread.

#### *5.2.2.1 Passive surveillance in wild boars*

The SFVS has taken measures to increase the level of passive surveillance in wild boars to the extent that it can be considered to be in compliance with the requirements of Directive 2002/60/EC, ASF guideline and Diagnostic Manual.

- A compensation will be paid for hunters for finding a dead wild boar and sending samples for laboratory analysis. The anticipated starting date for these payments is 1<sup>st</sup> of July 2014.
- 22 wild boars have been found dead between 24 January and 13 April 2014. Two of those were found in the risk area, 8 in the infected area and 12 in the rest of Lithuania. This is a significant increase over previous years (3-4 annually) and indicates that serious efforts to find dead wild boars have been made.
- All of the wild boars found dead have been tested for ASF with ELISA and rt-PCR – all results have been negative i.e. no ASF specific antibodies or DNA was detected.

#### *5.2.2.2 Active surveillance in wild boars*

- A total of 10,097 wild boars have been hunted and samples sent for laboratory analysis since 24 January; 898 from the infected area, 974 from the risk area and 8,225 from the rest of the country – all of them with negative laboratory results (ELISA and rt-PCR).
- Given that these figures represent sampling during a period of about three months and that the estimated population of the infected area is 3,000 animals, sampling can not continue at this level throughout the year (not enough wild boars to maintain the same rate).
- Sampling of wild boars is designed to have a 95% probability in detecting at least one

positive animal if the prevalence of the disease were (at least) 5% i.e. a minimum of 59 samples from each of the 51 territorial units. At the time of this audit, those targets were exceeded and for the rest of the year the main challenge is to maintain good level of surveillance while following the EFSA opinion i.e. to maintain a relatively stable wild boar population in the infected area.

The active surveillance system was not in compliance with the requirements in the following area:

- All feral pigs shot are not inspected by an official veterinarian, as required by Article 15.2(c) of Council Directive 2002/60/EC. Although pathological changes indicative of ASF in wild boar carcasses are likely to be detected by hunters, the additional guarantees provided by official inspection – are not being achieved. Official inspection also serves the purpose of verifying that all wild boars shot, will be subject to subsequent laboratory analyses – this objective is not achieved in the absence of official inspection.

#### *5.2.2.3 Passive surveillance in domestic pigs*

- Only 10 domestic pigs which have died on farm in the infected area have been sampled for laboratory analysis. Three out of the six territorial units in the infected area had no samples from dead domestic pigs sent to laboratory.
- All of these 10 domestic pigs have tested negative for ASF.
- All commercial farms are obliged to report weekly to the territorial services on the health status of the farm.
- Similarly, backyard holdings are obliged to report any movements of animals and clinical suspicions to the authorised veterinarian on a weekly basis.
- Clinical examination and blood sampling of domestic pigs in the risk and infected areas are currently being carried out as follows:
  - Large commercial and small production farms with high bio-security measures: every two months by private veterinarian and three times per year by official veterinarian. Blood samples are drawn if animals show suspicious clinical signs<sup>1</sup>.
  - Large commercial and small production farms with lower bio-security measures: every month by private veterinarian and three times per year by official veterinarian. Blood samples are drawn if animals show suspicious clinical signs.
  - Backyard holdings with fattening pigs will be visited quarterly by private veterinarians and 20% of these holdings will be visited by official vets. Blood samples are drawn if animals show suspicious clinical signs.

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<sup>1</sup> Sample size is determined to achieve a 95% probability in detecting at least one positive animal if the prevalence of the disease were (at least) 5%.

#### 5.2.2.4 *Active surveillance in domestic pigs*

- After ASF was confirmed in Belarus in June 2013, authorised veterinarians were ordered to carry out clinical examinations on all pigs in the buffer zone.
- On 24 January 2014, authorised veterinarians received an order to visit all pig farms in the buffer zone again, verify the presence of pigs and carry out clinical examinations and a census. According to the records examined by the audit team, these visits had been finalised by the time of the audit.
- As of 14 April 2014 a total of 5602 domestic pigs from 1894 holdings have been tested: 167 (from 56 holdings) from the risk area and 4072 (1337 holdings) from the infected area – all of them with negative laboratory results.
- In the infected area, all pigs slaughtered in back-yard holdings have been subject to laboratory tests (ELISA and rt-PCR).
- These data suggest that about 85% of back-yard holdings and about 75% of the pig population in the infected area have been sampled for laboratory analysis.

#### Conclusions

Passive surveillance of (dead) wild boars has improved significantly after the outbreak of January 2014 – this improvement can largely be attributed to SFVS training and awareness campaigns. As a result, the likelihood of future outbreaks remaining undetected in the wild boar population has decreased.

Census of pig holdings – together with continuous update of that census – has provided a good basis for clinical surveillance on back-yard holdings and this surveillance increases awareness and the likelihood of detecting unusual morbidity or mortality. However, the passive surveillance of domestic pigs remains relatively weak and, as such, is not effective in providing a sufficient level of confidence that ASF is being continuously ruled out as a potential cause of pig mortality.

Active surveillance has achieved its objective of providing reasonable assurances that circulation of ASF virus within the wild boar population is at a very low level – or absent – in the infected area. It is also very unlikely that with the current level of surveillance, the virus would have remained undetected if it was present in the back-yard pig population (of the infected area). The fact that all hunted wild boars are not being inspected by official veterinarians is a non-compliance and introduces some uncertainty in the completeness of the sampling scheme in wild boars.

Despite the weakness identified, overall it can be considered very unlikely that, with the current level of passive and active surveillance, ASF would have remained undetected if it were present.

### 5.3 PREVENTIVE MEASURES

Preventive measures fall under two broad categories: a) measures aimed at preventing the (re-)introduction of the disease and b) measures aimed at preventing further spread of the disease. The former (a) comprises wild boar population management, bio-security measures and import controls. The latter (b) consists mainly of trade restrictions and, to some extent, bio-security measures.

The SFVS have implemented preventive measures largely in compliance with Council Directive 2002/60/EC, Decision 2014/178/EU and the ASF guidelines. The recent EFSA recommendations<sup>2</sup> are in the process of being implemented. Enforcement of bio-security rules has been only partially effective, leaving some room for improvement:

#### 5.3.1 *Wild boar population management*

- According to a recent EFSA opinion, the population of wild boars should be maintained at a stable level in order not to promote excessive movements of animals and subsequent introduction of infected animals from surrounding (infected) areas.
- Hunters have – until the time of the audit – understood that the objective is 100% reduction of wild boars in the infected zone and 90% reduction elsewhere in Lithuania.
- This has been due to mis-communication from the SFVS to the hunters. The intention – according to SFVS – was merely to kill such a number of animals as to provide for a sufficient amount of samples to verify absence of disease with a reasonable level of confidence.
- The future policy of the SFVS – in line with EFSA opinion – is now in the process of being drafted and communicated to the hunters.
- The current hunting level in the infected area – if projected over a full year – is excessive and cannot be maintained without jeopardizing sufficient level of sampling.
- The current hunting level in the infected area – if projected over a full year – is also excessive in light of the EFSA opinion.

#### 5.3.2 *Bio-security measures*

- Bio-security rules are laid down in Order B1-384 of 11 July 2011 which, in summary, oblige keepers to:
  - (a) register incoming visitors and vehicles;

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<sup>2</sup>: EFSA-Q-2014-00149; EFSA Journal 2014; 12(3):3616

- (b) only use registered veterinary medicinal products;
  - (c) notify diseases;
  - (d) prevent contacts between domestic pigs and wild animals (feral pigs);
  - (e) provide access to authorised veterinarians;
  - (f) not bring foodstuffs into the premises where pigs are held;
  - (g) handle fallen stock and animal by-products appropriately;
  - (h) not use swill-feeding;
  - (i) control pests and apply appropriate cleaning and disinfection procedures;
  - (j) not participate in wild boar hunting and
  - (k) treat manure according to instructions.
- In the buffer zone, small holdings which are not able to comply with these bio-security measures have been closed i.e. all pigs have been culled from such holdings.
  - Big commercial holdings tend to have satisfactory albeit variable levels of bio-security. The measures applied in these holdings are continuously monitored by SFVS.
  - The inspections by SFVS show that a substantial number of commercial holdings (20%) still do not fully comply with all of the bio-security rules. The non-compliance rate amongst back-yard holdings is over 50% (outside the buffer zone). The main difficulties for the back-yard holdings – as explained to the audit team – are: handling of animal by-products, disinfection, fencing and changing rooms (for clothing).

### 5.3.3 *Trade restrictions*

- The measures prescribed by Decision 2014/178/EU have been transposed by Orders B1-114 of 17 February 2014 and B1-128 of 21 February 2014.
- These Orders prohibit:
  - the dispatch of live pigs, semen or embryos, pig meat, products of pig origin and animal by-products of pig origin from the infected zone outside Lithuania; and
  - The dispatch outside Lithuania of wild boar meat or meat products and animal by-products of wild boar origin from the whole territory of Lithuania.
- There are three slaughterhouses approved for slaughtering pigs originating from the infected area – two of them inside the infected area and one in the risk area.
- Slaughtering of domestic pigs from the infected area is subject to a movement permit,

sampling for laboratory analysis at the slaughterhouse<sup>3</sup> and carcasses are stamped with a health mark for national market only.

- Animal markets are forbidden in the infected and risk areas; no collection or assembly centres are operational at the moment in Lithuania.
- Due to time and logistical constraints, the audit team could not verify the practical implementation of the measures described in this section.

## Conclusions

The preventive measures in place provide assurances that should the disease re-emerge, its further spread is limited before being detected. Measures are taken to prevent ASF from being transmitted from wild boars to pig holdings in the infected area and from being further spread to other parts of Lithuania or to other countries. The significant reduction in the wild boar population within the infected area has the potential of triggering future movements of infected animals from surrounding areas. This risk of re-introduction of the disease is mitigated by increased vigilance and surveillance, which contribute to early detection of possible re-emergence of ASF.

### **5.4 VERIFICATION, SUPERVISION AND EXPERT GROUP**

Verification of the effectiveness of official controls, as required by Article 8.3 of Regulation (EC) No 882/2004, is foreseen in the SFVS Quality Manual. However, these verification activities have not been implemented in practice:

- According to the SFVS Quality Manual, the Heads of territorial units have a role in verifying compliance with procedures and effectiveness of control activities – including the monitoring of delivery according to the annual control plan.
- In neither of the territorial units visited, could the audit team obtain a comprehensive and unambiguous overview of the current delivery of the programme or of the effectiveness of official controls carried out at territorial units. The risk-based planning and targeting of on-farm controls lacked clear criteria, and evaluation (or overview) of controls could not be demonstrated to be an ongoing process.
- The control results are currently delivered directly to the Emergency Response Department (ERD) from the territorial units and the ERD has an up-to-date overview of the number of controls carried out and their results. However, the ERD does not have the resources to evaluate the controls or to verify the effectiveness of controls in all of the 51 territorial units.

An independent expert group was established in accordance with Article 16.2(a) of Directive 2002/60/EC but so far, this group provided relatively limited input to the eradication activities. In particular, last sub-indent of Article 16.2(a) (verifying the effectiveness of eradication measures) has not been implemented:

- The group comprises 18 members: 6 from Central Veterinary office, 2 from Strategic Planning and Quality Management division, 2 Chief Specialists, 3 from Lithuanian

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<sup>3</sup> Sample size is determined to achieve 95% probability in detecting at least one positive animal if the prevalence of disease were (at least) 5%.

University of Health Sciences, 1 from Environment Protection Service, 2 from National Food and Veterinary Risk Assessment Institute, 1 from Ministry of Environment, 2 from Nature Investigation Centre and 1 from Pig Breeders Association.

- The group has met only twice and its main role so far has been to evaluate the draft eradication plan which was submitted to the Commission on 25 April 2014.
- The CA indicated that they are planning to divide this relatively large group into smaller sub-groups, each with a specific set of expertise, in order to deal with specific issues in a more efficient and effective way.

## Conclusions

The Heads' of territorial units role in continuous monitoring and evaluation of controls – as prescribed in the SFVS Quality Manual – is currently not implemented in practice. Although information on the results of controls flow directly to ERD allowing an overview to be maintained, the effectiveness of controls and consistency across territorial units is not being verified on a regular basis.

The expert group prescribed in Directive 2002/60/EC has not been used to its full potential and in particular, its valuable role in verifying the effectiveness of eradication measures remains to be implemented.

The lack of regular verification and evaluation activities by senior managers and scientific experts allows potential weaknesses in ASF controls to remain undetected. Using the insight of these two groups is important in identifying areas for improvement in control measures, particularly when the risk of ASF re-emergence still remains high.

## **6 OVERALL CONCLUSIONS**

The Competent Authority has taken effective measures to prevent further spread of the ASF outbreak detected in wild boars in January 2014. These measures included adequate demarcation of the infected area around the out-break, increasing bio-security measures on pig holdings, increasing passive and active surveillance activities and introducing movement controls/restrictions on live animals and products of porcine origin. The setting up of a risk area around the infected area and a buffer zone along the Belarusian border further enhance the control measures and go beyond the legal requirements.

Results from surveillance activities indicate that the outbreak in January was detected early enough i.e. before further spread of the disease occurred and that newly introduced protective measures were effective in containing the outbreak. The results also indicate that the probability of ASF virus still circulating in the wild boar population (or domestic pig population) is very low. A risk of a new outbreak(s) still exists but the current level of surveillance and preventive measures applied can be considered effective in ensuring early detection of ASF and to prevent further spread of the disease.

## 7 CLOSING MEETING

During the closing meeting held in Vilnius on 16 April 2014, the audit team presented the main findings and preliminary conclusions of the audit to the competent authority. During this meeting, the competent authority did not indicate any major disagreement with the findings and preliminary conclusions.

## 8 RECOMMENDATIONS

The competent authority is requested to provide the Commission services with an action plan, including a timetable for its completion, within one month of receipt of the report in order to address the deficiencies identified in the report and in particular, the following:

N°.	Recommendation
1.	To communicate to the hunters the current wild boar population management policy to ensure that it is understood correctly and implemented effectively as recommended by EFSA report: EFSA-Q-2014-00149 (EFSA Journal 2014; 12(3):3616).
2.	To improve passive surveillance in domestic pigs by increasing the number of laboratory analysis carried out on pigs that have died on farm in order to ensure effective implementation of the section “surveillance in domestic pigs” in the ASF guideline (SANCO/7138/2013).
3.	To ensure that each wild boar carcass is inspected by an official veterinarian as required by Article 15.2(c) of Council Directive 2002/60/EC. These inspections should also be used to verify that each wild boar hunted is appropriately sampled for laboratory analysis.
4.	To improve the use of data in the pig database to identify holdings, which may have introduced animals without notifying them – in order to give effect to the requirement of Article 15 (b) of Directive 2002/60/EC on carrying out and up-dating a census of all categories of pigs.
5.	To ensure that Heads of territorial units are monitoring and verifying the effectiveness of controls as specified in the SFVS Quality Management System in order to give effect to the requirement in Article 8(3) of Regulation 882/2004.
6.	To ensure that the expert group provides assistance in all areas covered by the sub-indent of Article 15.2(a) of Directive 2002/60/EC and in particular, in the verification of effectiveness of eradication measures, as required by the last sub-indent.

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=2014-7295](http://ec.europa.eu/food/fvo/rep_details_en.cfm?rep_inspection_ref=2014-7295)

## ANNEX 1 - LEGAL REFERENCES

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
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
Dec. 2003/422/EC	OJ L 143, 11.6.2003, p. 35-49	2003/422/EC: Commission Decision of 26 May 2003 approving an African swine fever diagnostic manual
Dec. 2014/178/EU	OJ L 95, 29/03/2014, p. 47-55	2014/178/EU: Commission Implementing Decision of 27 March 2014 concerning animal health control measures relating to African swine fever in certain Member States
<i>Guidelines and scientific opinions</i>		

EFSA-Q-2014-00149; EFSA Journal 2014; 12(3):3616 Evaluation of possible mitigation measures to prevent introduction and spread of African Swine Fever virus through wild boar.

SANCO/7138/2013; Guidelines on surveillance and control of African swine fever in feral pigs and preventive measures for pig holdings.

ANNEX 2: Buffer zone, risk area and infected area

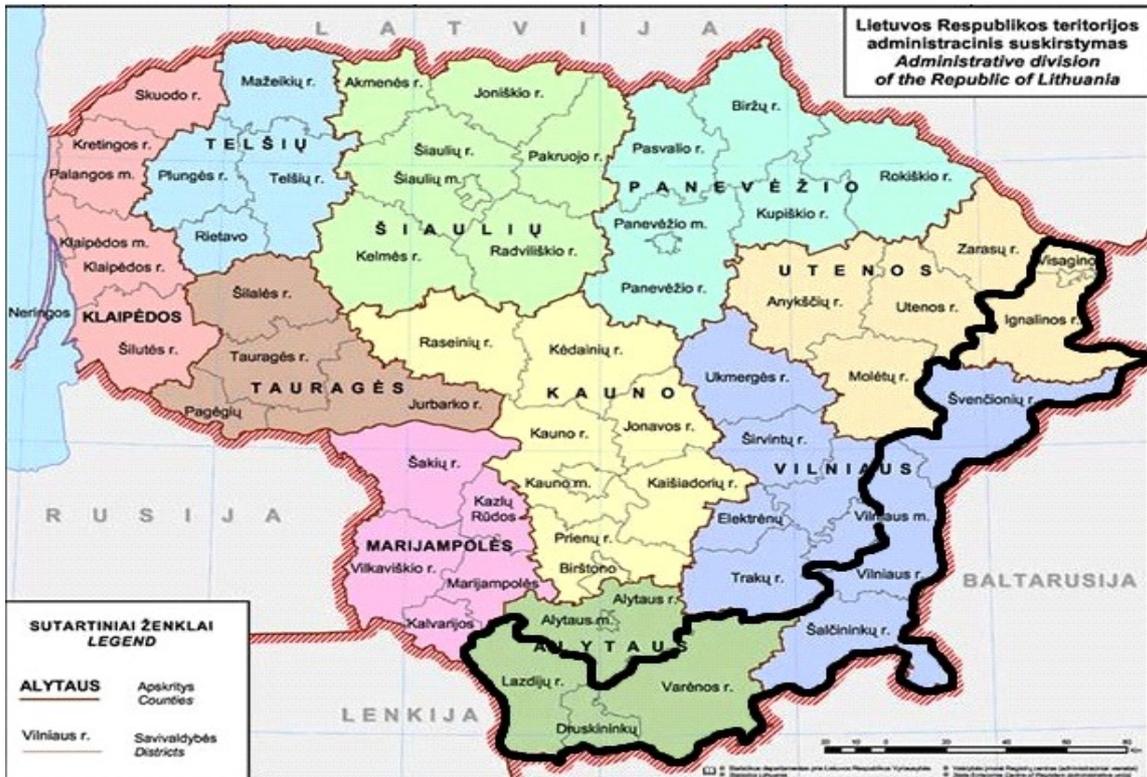


Figure 1: the buffer zone (demarcated by the thick black line) established in July 2013 after ASF was detected on the Belarusian side of the border.

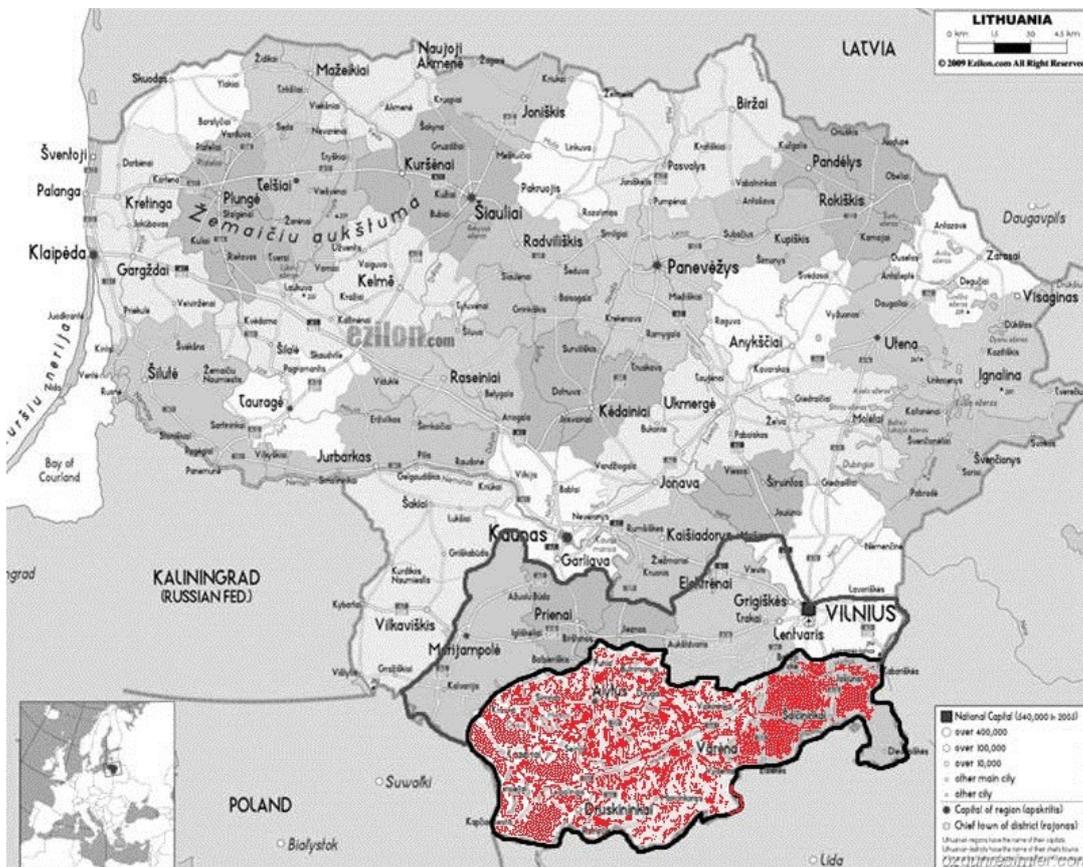


Figure 1: Infected and risk area - infected area is shown as red, risk area is demarcated by the thick black line going through Vilnius and Kaunas